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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 quarterly, containing articles about Virginia ornithology, as well as news of the activities of the Society and its chapters.

4. 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 \$1.00 for junior members (students), \$2.00 for active members, \$4.00 for sustaining members, \$50.00 for life members.

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THE BREEDING BIRD SURVEY IN VIRGINIA, 1966-1968

WILLET T. VAN VELZEN

In 1965 the Bureau of Sport Fisheries and Wildlife initiated a Breeding Bird Survey in Maryland and Delaware designed to measure changes in bird populations. The following year the Survey was expanded to include Virginia, 24 other eastern States, and 4 Canadian Provinces. Figure 1 shows the distribution of all the routes selected for Virginia, 12 of which were assigned the first year.

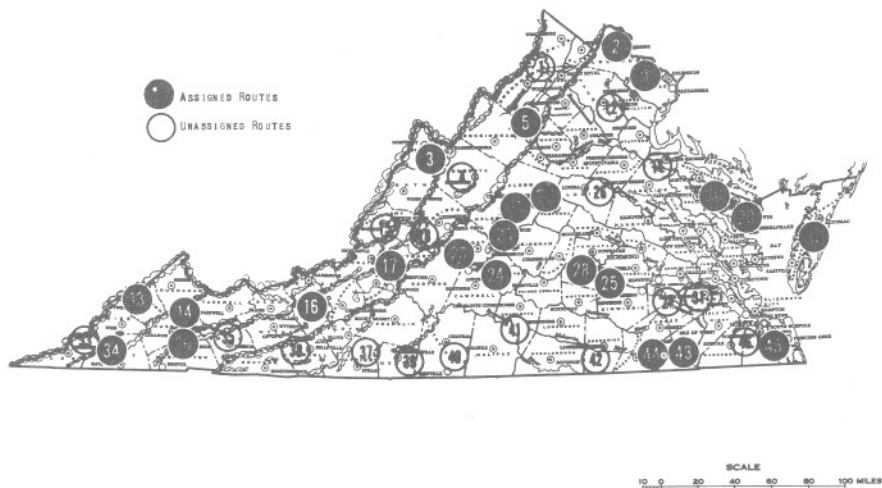


Figure 1. Location of Breeding Bird Survey routes in Virginia.

In 1967 the Survey was extended westward to those States and Provinces falling on or east of the 100th meridian, and coverage in Virginia increased to a total of 21 routes. In 1968 the Survey encompassed all the continental United States, Alaska, and 9 Canadian Provinces. The number of Virginia routes covered increased to 23.

Survey routes throughout the continent were selected at random on a degree-block basis of latitude and longitude. Each Survey route consists of 50 three-minute stops spaced at one-half mile intervals along a suitable road system. Routes are run only once a year, during the month of June, on a day when the weather meets a set of favorable conditions. Coverage begins one-half hour before sunrise and takes approximately 4 to 4½ hours for completion.

It is apparent that a roadside survey of this type best measures the most conspicuous species. This is readily shown in Table 1 where totals are given for the 10 species recorded in greatest numbers in Virginia in 1968. This species list is quite similar to that published by Hall (1967) for West Virginia except that in his list, Robin, Wood Thrush, and Red-eyed Vireo replaced Mockingbird, Mourning Dove, and Bobwhite. Even greater similarity is shown with the list of the 10 most conspicuous species recorded in Maryland (Van Velzen, 1966) where the Robin replaces Virginia's Indigo Bunting, with Delaware (Linehan, 1967) where the Chipping Sparrow replaces Virginia's Mourning Dove, and with Tennessee (Howell, 1966) where the Eastern Meadowlark replaces Virginia's Mockingbird. Although the lists vary by only one species

in each case, the order of the species' abundance is different. In columns 3 and 4 of Table 1 the top 10 species for the Eastern United States and the entire continent are given for comparison, arranged in descending order of abundance. It is readily seen that conspicuous species, commonly found along roads and "edge" situations, are recorded in greatest numbers. Birds that are quite secretive and less vocal are naturally recorded in much smaller numbers even though they may actually be more abundant than more conspicuous species. Likewise, birds of the deep forest are usually not recorded in appreciable numbers as that habitat is frequently not well sampled. Still, the list of 117 species recorded in Virginia in 1968 shows that this sampling technique touches a very large number of species to some degree. This same technique has also been used to sample other areas where population estimates are desired (Linehan, 1968) and has been useful in detecting species which previously were infrequently recorded as breeding birds (Wilson, 1967).

Table 1. Species recorded in greatest numbers.

<i>Virginia (1968)</i>	<i>Eastern United States (1966)</i>	<i>North American Continent (1968)</i>
Common Grackle	Common Grackle	Red-winged Blackbird
Starling	Starling	House Sparrow
Bobwhite	House Sparrow	Common Grackle
House Sparrow	Red-winged Blackbird	Starling
Common Crow	Robin	Robin
Cardinal	Common Crow	Mourning Dove
Mockingbird	Bobwhite	Common Crow
Mourning Dove	E. Meadowlark	E. Meadowlark
Indigo Bunting	Cardinal	W. Meadowlark
Red-winged Blackbird	Mourning Dove	Bobwhite

The Survey is not intended to provide data that will give precise population figures, such as birds per acre, for the species recorded. The totals simply give an index to the population, and repeated coverage of a route in future years will provide a comparison which would show significant changes should they occur. Organization of the Survey and an analysis of the results have been presented in detail by Robbins and Van Velzen (1967).

In 1968, 19 species were recorded on every route in Virginia and another 6 were missed on only one route. Most of these 25 species are listed in Table 2, arranged by frequency of occurrence (Percentage of Stops) instead of the total numbers recorded. In addition to those species shown in the table, Yellow-shafted Flicker, Brown Thrasher, and American Goldfinch were found on all routes, and Chimney Swift, Eastern Wood Pewee, and Barn Swallow on all but one route. This table shows more clearly the ubiquity of different birds, for although a particular species may have been listed on every route, it was often recorded on a much lower percentage of stops than other species. For example, both Bobwhites and Tufted Titmice were found on all routes, but Bobwhites were recorded on 57 percent of all stops compared to 13 percent for titmice.

Table 2. Twenty most ubiquitous species recorded in Virginia.

	<i>Total Number Recorded</i>	<i>Percentage of Stops</i>	<i>Percentage of Routes</i>
Bobwhite	1117	57	100
Mockingbird	782	46	100
Cardinal	800	44	100
Indigo Bunting	645	43	100
Common Crow	960	40	100
Common Grackle	3445	39	100
Mourning Dove	707	33	100
Rufous-sided Towhee	476	29	100
Robin	639	29	96
Field Sparrow	399	29	100
E. Meadowlark	612	28	100
Chipping Sparrow	418	27	96
Starling	1717	26	100
Wood Thrush	349	22	100
House Sparrow	1104	20	100
Red-eyed Vireo	291	20	100
Red-winged Blackbird	645	19	100
Blue Jay	311	17	96
Yellow-breasted Chat	225	16	83
Tufted Titmouse	203	13	100

The total number of species identified on each route ranged from 43 to 63, irrespective of the location of the route within the State; and the total number of individuals for each route in 1968 ranged from 481 to 2475. The highest totals of individuals were recorded in the northern and coastal areas and the lowest in the more mountainous regions of the State. In many cases the high totals resulted from large numbers of Common Grackles.

Distribution maps for 5 species, prepared from the 1968 Survey data, are shown in Figures 2 through 7. The abundance of the Cardinal, Virginia's State bird, is shown in Figure 2. Those interested in populations of this species should compare this map with that published by Robbins (1969) for Maryland. The Cardinal appears to be most numerous throughout the central part of the State and decreases in the western mountainous portions and the coastal areas.

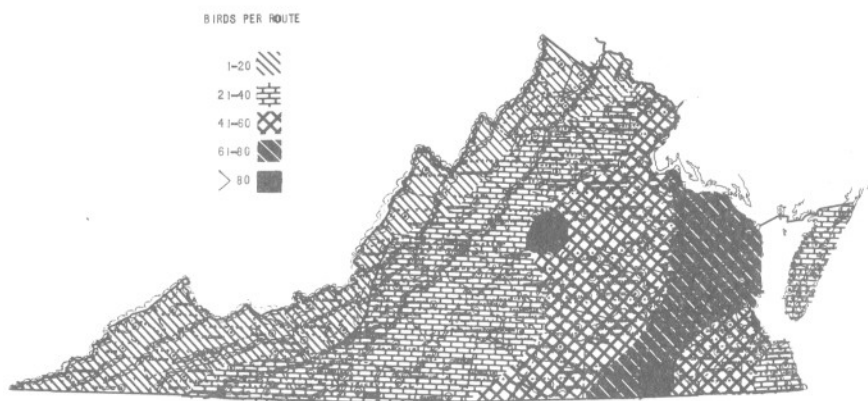


Figure 2. Distribution and abundance of the Cardinal in Virginia, 1968.

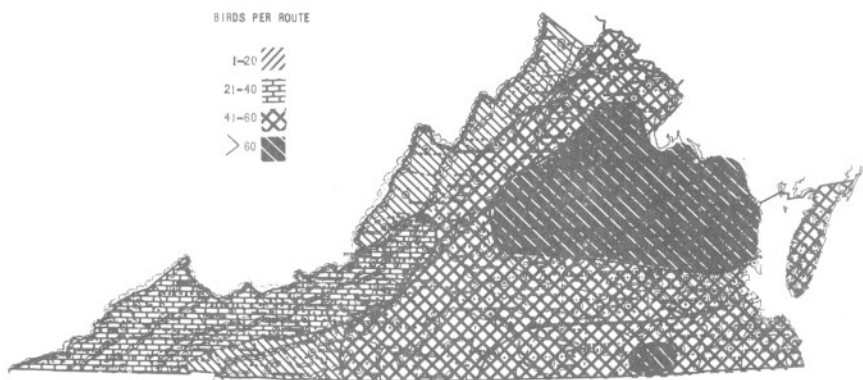


Figure 3. Distribution and abundance of the Bobwhite in Virginia, 1968.

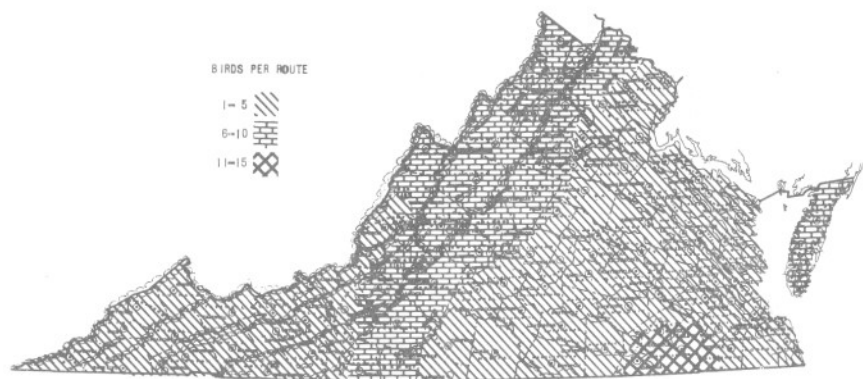


Figure 4. Distribution and abundance of the Yellow-shafted

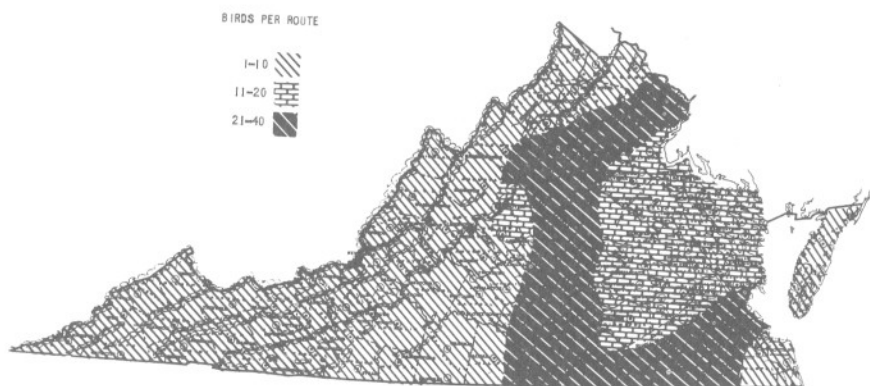


Figure 5. Distribution and abundance of the Blue Jay in Virginia, 1968.

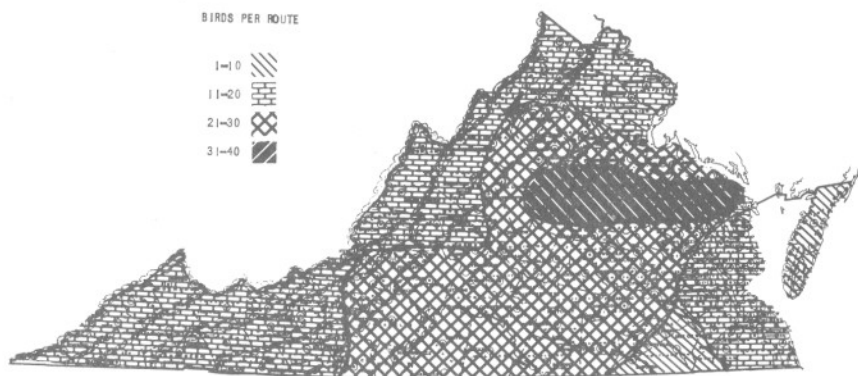


Figure 6. Distribution and abundance of the Field Sparrow in Virginia, 1968.



Figure 7. Distribution of locally breeding warblers in Virginia, 1968.

The density of Bobwhite, shown in Figure 3, is greatest on those routes lying primarily in the Piedmont and Coastal Plain and decreases sharply in the Blue Ridge and Ridge and Valley region in the western portion of the State. In contrast to this, the Yellow-shafted Flicker (Figure 4) was primarily recorded in greatest abundance along the Blue Ridge and then dropped off somewhat in the Piedmont and Ridge and Valley sections.

The harlequin pattern of the Blue Jay's abundance in Figure 5 is difficult to attribute to any particular physiographic features, although it is somewhat lower in the Ridge and Valley and Blue Ridge sections and higher throughout the Piedmont. This pattern also holds for the Field Sparrow (Figure 6), although fairly high populations were recorded in parts of the Blue Ridge.

Figure 7 shows 10 species of warblers, whose distributions are local, which were recorded in comparatively small numbers within the State.

Special thanks are extended to the observers who assisted in running the survey routes. The number in parentheses indicates the total number of routes each observer ran over the past 3 years. An asterisk signifies that the observer assisted with the Survey all 3 years.

Louise Babcock* (3), Floy C. Burford* (3), Mitchell A. Byrd (2), Max M. Carpenter (2), William S. Clark (2), James W. Eike* (3), Ruskin S. Freer (3), B. W. Haines (4), Harry G. M. Jopson (1), A. R. Miles (2), John W. Murray (2), Sally Nelson (1), H. W. Nunley (2), E. Gertrude Prior (2), K. C. Richards (1), Richard W. Russell (1), Robert J. Schaefer (1), Frederic R. Scott* (10), C. C. Steirly (1), Charles E. Stevens (2), Edmund W. Stiles (3), Carey A. Stone (1), Mrs. E. L. Umbarger (1).

Additional support was given to the Survey by the following individuals who assisted the observers as drivers, timers, and recorders: Mrs. William A. Beatty, David C. Brodie, L. E. Burford, Opal Carpenter, Eleanor Christie, Claire L. Eike, C. W. Hacker, Mary J. Haines, Virginia Hank, J. G. Johnson, Mrs. A. R. Miles, Ruth T. Murray, Mrs. H. W. Nunley, Keith Richards, M. J. W. Richards, Emily Umbarger.

The success of the Survey in Virginia is attributed to the fine cooperation received from the above individuals, many of whom expended a considerable amount of time, effort, and money in order to complete their routes. Birders who can identify the breeding birds of Virginia by sight and sound and who would be able to cover any of the unassigned routes shown in Figure 1 are urged to contact the author.

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Bureau of Sport Fisheries and Wildlife
Migratory Bird Populations Station
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VIRGINIA CHRISTMAS BIRD COUNTS—1968-69 SEASON

F. R. SCOTT

The popularity of the Christmas bird counts continues unabated in Virginia. This year 217 different observers participated in the 23 counts that were submitted to *The Raven*, and a number of these observers took part in three or more of the counts. In spite of the fact that these figures do not match the 251 observers who took part in 26 counts in the 1965-66 season, last year's record total of 189 species was equaled this year.

Although only 23 counts were submitted to *The Raven*, two others overlapped into the state—Washington, D. C., and Seneca, Md.—and three other state counts were not sent in—Clarke County, Nickelsville, and Powhatan. All of these were submitted for publication in the April 1969 issue of *Audubon Field Notes*. Four counts often published in prior years were apparently not taken this year—Chesapeake (Norfolk County), Nansemond River, Mt. Rogers-Whitetop, and Bristol.

Four species are apparently new to Virginia Christmas counts this year—Parasitic Jaeger, Prairie Warbler, Northern Waterthrush, and Yellow-headed Blackbird—and the cumulative Christmas count list for Virginia now stands at 248. Some 24 species were reported from only a single count. All of the regular species were found this year, and of the "irregulars" that were not recorded, the most interesting were the Piping Plover, Knot, Royal Tern, Black Skimmer, and Barn Owl.

The weather was hardly ideal for the counts. Although no snow was reported on any count, the six of them that chose 28 December as their count day were hit by heavy rain, which cleared fairly early in the west but not until 4 p.m. on the coast. Rain also hit two other counts, especially Fort Belvoir on 22 December. The weather certainly had a significantly depressing effect on coverage,

the number of participants, and the total party-hours, the latter being down to 1003 from the record 1085 of the 1966-67 counts.

Four counts surpassed the magic figure of 100 species. Cape Charles, organized like a military operation, hit an all-time state record of 157 species. Chincoteague, with driving rain and fog almost all day, was a poor second with 139 species, followed by Back Bay with 138 and Little Creek with 129. These counts also had some of the best coverage of all those made in the state, ranging from 64 to 108 party-hours each. Other counts with good coverage included Brooke and Fort Belvoir, 69 party-hours each, Roanoke with 51 party-hours, and Blacksburg with 81. The latter also reported 70 species, not a record but still excellent for a winter count west of the Blue Ridge. Lexington had a record all its own. Led by Dr. J. J. Murray, Lexington has published 39 different Christmas counts in *The Raven* since the winter of 1929-30.

The count tabulation in Table 1 is more or less in order of distance inland from the coast. Counts 1-8 were all on the Coastal Plain, 9-13 were on the Piedmont, and the rest were from the Blue Ridge westward. The count locations are shown in Figure 1. Details on each count are given further along in this summary.

Counts of pelagic birds were down this year, probably mainly because of poor weather or strong off-shore winds. In the case of the scoters, however, there are other indications that the normal winter population along the coast was simply not present. Wintering herons and egrets were local and not impressive, though it was interesting to see that five of the Valley counts reported Great Blue Herons. Cattle Egrets were found twice and constituted the third and fourth count records for the state. The last one was 5 years ago.

A Whistling Swan at Blacksburg was unusual and was wisely checked a few days later. Newport News had the only report of the Blue-winged Teal, and a Common Eider was seen at Cape Charles, a second Virginia count record. The Red-tailed Hawk continued its relative increase over the Red-shouldered Hawk, with totals of 111 Red-tails seen on 21 counts versus 46 Red-shoulders on 7 counts. The count of 7 Bald Eagles on 4 counts seems to indicate another low point for this species. An Osprey was reported again on the Hopewell count, and Cape Charles recorded a record 4 Pigeon Hawks. The Black Rail at Cape Charles was the second Virginia Christmas count record, the first being at Chesapeake ("Norfolk County") in 1959.

The 122 American Woodcock at Cape Charles was an all-time peak count for any U. S. Christmas count, and following a trend noticed first 2 years ago, the Common Snipe was widely reported west of the Blue Ridge. Notable shorebird counts included 28 Ruddy Turnstones at Newport News, 46 Willets at Cape Charles, and 7 Least Sandpipers—rare inland—at Hopewell. A Parasitic Jaeger at Back Bay was a first state count record, and a Herring Gull at Roanoke was the only gull reported west of the Coastal Plain. The 4330 Bonaparte's Gulls at Little Creek and the 3000 at Back Bay were probably among the best winter counts on record, and a Common Tern found at Chincoteague was quite unusual.

Some 40 Eastern Phoebe were noted on 9 counts, a satisfying increase over recent years. Blacksburg's count of 106 White-breasted Nuthatches was second—at least in recent years—only to the 109 reported by Fort Belvoir in 1966. The wintering Eastern Bluebird population seems to be increasing slowly, although it still has not reached anywhere near its abundance prior to the disastrous winter of 1960-61 (*Raven*, 34: 12, 1963). This year 191 were reported on 12 counts, or 19 per 100 party-hours. This compares with 155 on 18 counts last year, or 15 per 100 party-hours. However, the count this year was biased a bit by the fact that Back Bay reported 70, over a third of the total. Cape Charles's total of 1414 Water Pipits was excellent, as was Hopewell's report of 17 Loggerhead Shrikes. Warblers provided a nice surprise. A Black-and-white Warbler at Little Creek was only the third Virginia count record, although

Table 1. The 1968-69 Christmas bird counts for Virginia. Notations in boldface type indicate an unusual species or an unusual number of individuals for that particular count. Items marked with an asterisk (*) are commented on further under count summaries.

	1. Chincoteague	2. Cape Charles	3. Little Creek	4. Back Bay	5. Newport News	6. Hopewell	7. Brooke	8. Fort Belvoir	9. Charlottesville	10. Warren	11. Darlington Heights	12. Sweet Briar	13. Lynchburg	14. Big Flat	15. Rockingham Co.	16. Augusta Co.	17. Waynesboro	18. Three Ridges	19. Lexington	20. Peaks of Otter	21. Reanoke	22. Blacksburg	23. Glade Spring
Date	12/28	12/29	12/27	12/30	12/28	12/21	12/20	12/22	12/28	12/29	12/21	1/1	12/28	12/26	1/1	12/21	12/28	12/21	12/21	12/27	12/28	12/27	12/30
Common Loon	28	10	11	11	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Red-throated Loon	2	1	3	297	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Red-necked Grebe	2	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Horned Grebe	70	80	194	199	41	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pied-billed Grebe	35	13	60	257	15	5	....	....	2	....	....	....	1	....	1	....	....	....	....	....	3	4	....
Gannet	....	....	....	47	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Double-crested Cormorant	1	....	2	....	49	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Great Blue Heron	67	76	149	24	12	22	21	7	1	1	1	....	....	....	1	2	1	....	1	....	....	1	....
Green Heron	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Little Blue Heron	6	19	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Cattle Egret	....	1*	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Common Egret	11	....	35	14	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Snowy Egret	....	17	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Louisiana Heron	21	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Black-crowned Night Heron	56	31	23	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
American Bittern	3	4	....	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1*	....
Whistling Swan	44	26	....	3,585	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Canada Goose	1,090	1,833	....	9,300	2	7,400	27	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Brant	4,911	6,057	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Snow Goose	3,839	....	7	27,800	....	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Blue Goose	4	....	....	8	....	....	35	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mallard	248	208	301	1,604	175	2,015	140	9	130	140	....	....	2	9	84	3	18	....	....	....	32	43	90
Black Duck	2,050	1,279	147	1,201	7	1,420	125	32	60	....	....	....	....	....	20	....	10	....	....	....	44	1	16
Gadwall	166	79	30	41	21	....	....	....	2	....	....	....	....	....	23	....	....	....	....	....	....	2	....
Pintail	1,343	64	11	235	....	825	....	1	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....
Green-winged Teal	69	112	87	163	....	24	....	7	....	4	....	....	....	....	....	....	....	....	4	....	4	2	....
Blue-winged Teal	....	....	....	....	4*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	32	10
American Widgeon	111	218	43	13,200	1,240	168	22	....	16	....	....	....	....	....	79	....	....	....	....	....	....	....	....
Shoveler	270	59	118	170	....	5	....	....	....	....	....	....	....	....	3	....	....	....	....	....	....	....	....
Wood Duck	....	6	6	5	1	225	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....

	1. Chincoteague	2. Cape Charles	3. Little Creek	4. Back Bay	5. Newport News	6. Hopewell	7. Brooke	8. Fort Belvoir	9. Charlottesville	10. Warren	11. Darlington Heights	12. Sweet Briar	13. Lynchburg	14. Big Flat	15. Rockingham Co.	16. Augusta Co.	17. Waynesboro	18. Three Ridges	19. Lexington	20. Peaks of Otter	21. Roanoke	22. Blacksburg	23. Glade Spring
Date	12/28	12/29	12/27	12/30	12/28	12/21	12/20	12/22	12/28	12/29	12/21	1/1	12/28	12/26	1/1	12/21	12/28	12/21	12/21	12/27	12/28	12/27	12/30
Redhead	....	9	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ring-necked Duck	12	1	97	4	57	68	....	1	24	22	....	....	....	....	7	....	....	....	....	....	....	....	....
Canvasback	....	....	172	1	170	....	....	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Greater Scaup	36	1	58	26	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lesser Scaup	....	2	154	....	366	....	5	....	....	1	....	1	....	....	5	....	....	....	....	....	32	35	....
Scaup (sp. ?)	17	....	....	....	....	....	....	441	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Common Goldeneye	33	90	1	2	96	....	5	1	....	....	....	....	....	2	....	....	....	....	....	....	....	27	....
Bufflehead	529	2,740	65	8	38	51	36	57	....	....	....	....	....	....	4	....	3	....	....	....	....	....	....
Oldsquaw	43	4	2	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Common Eider	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
White-winged Scoter	55	2	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Surf Scoter	....	18	87	121	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Common Scoter	14	35	1	14	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ruddy Duck	72	2	75	....	95	670	115	662	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hooded Merganser	30	71	234	3	61	51	....	2	....	....	....	....	....	....	....	....	....	....	....	....	1	7	....
Common Merganser	19	2	....	19	2	49	200	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Red-breasted Merganser	64	124	16	28	16	....	9	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Turkey Vulture	63	59	1	23	4	44	50	....	20	23	11	4	7	24	21	3	4	35	....	24	20	....	....
Black Vulture	....	1	11	27	....	4	9	....	4	50	7	16	2	2	8	....	3	6	1	....	....	25	....
Sharp-shinned Hawk	3	5	....	11	....	....	2	1	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....
Cooper's Hawk	....	1	1	1	....	1	....	....	1	....	1	....	2	....	....	....	....	....	....	....	....	....	....
Red-tailed Hawk	4	13	9	27	1	7	7	6	5	6	1	1	4	4	1	....	....	2	4	2	2	4	1
Red-shouldered Hawk	3	1	12	12	....	7	6	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rough-legged Hawk	3	1	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bald Eagle	....	....	1	....	....	1	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Marsh Hawk	12	42	4	49	1	1	2	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Osprey	....	....	....	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Peregrine Falcon	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pigeon Hawk	2	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sparrow Hawk	23	45	37	164	13	7	7	2	1	1	10	1	2	1	1	1	1	....	5	....	5	4	2
Ruffed Grouse	....	....	....	....	....	....	....	....	....	3	2	....	....	27	1	....	....	1	4	2	1	5	....
Bobwhite	66	104	60	92	29	10	80	55	13	45	2	....	46	28	38	24	....	....	82	14	10	78	....
Ring-necked Pheasant	....	8*	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Turkey	....	....	....	....	....	1	....	....	....	4	2	....	....	5	....	....	....	3	....	....	....	....	....
King Rail	....	7	1	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Clapper Rail	14	22	11	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Virginia Rail	....	13	....	14	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sora	....	4	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Black Rail	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Common Gallinule	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
American Coot	7	146	28	95	107	....	....	1	....	....	....	....	....	25	....	....	....	....	....
American Oystercatcher	17	144	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Semipalmated Plover	1	1	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Killdeer	38	98	29	16	93	51	18	24	....	1	....	4	....	14	....	3	....	6	....
Black-bellied Plover	69	716	3	....	9	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ruddy Turnstone	20	16	....	....	28	....	....	....	....	....	....	....	....	....	....	....	....	....	....
American Woodcock	8	122*	....	3	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....
Common Snipe	11	26	5	32	....	23	4	....	....	12	....	1	....	8	....	1	....	8	....
Whimbrel	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Willet	2	46	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Greater Yellowlegs	5	22	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lesser Yellowlegs	7	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Purple Sandpiper	....	1	36	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Least Sandpiper	3	5	....	....	....	....	....	7*	....	....	....	....	....	....	....	....	....	....	....
Dunlin	703	5,609	129	....	82	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Dowitcher (sp. ?)	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Semipalmated Sandpiper	....	423	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Western Sandpiper	11	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sanderling	445	82	87	212	123	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Parasitic Jaeger	....	....	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Great Black-backed Gull	318	305	388	121	117	6	110	8	....	....	....	....	....	....	....	....	....	....	....
Herring Gull	1,109	6,427	8,500	2,147	3,145	310	500	307	....	....	....	....	....	....	....	....	....	....	....
Ring-billed Gull	408	939	4,800	1,378	2,904	1,380	350	328	....	....	....	....	....	....	....	....	....	....	....
Laughing Gull	1	....	1	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bonaparte's Gull	114	11	4,330	3,000	164	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Forster's Tern	2	....	67	41	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Common Tern	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mourning Dove	382	154	491	595	152	107	65	181	48	51	76	106	58	....	569	1	46	....	....
Screech Owl	2	13	3	9	....	....	....	....	1	2	....	....	....	3	....	....	....	....	....
Great Horned Owl	3	5	4	7	....	1	2	8	....	....	....	....	....	2	....	....	....	....	....
Barred Owl	....	1	2	6	....	1	2	3	1	....	....	....	....	....	....	....	....	....	....
Short-eared Owl	3	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Belted Kingfisher	42	18	10	15	14	5	15	5	4	1	....	....	....	3	....	4	2	3	....
Yellow-shafted Flicker	126	148	43	191	46	45	60	95	8	9	8	2	4	7	6	1	....	2	....
Pileated Woodpecker	5	....	9	11	1	4	18	16	6	11	1	4	8	7	3	1	1	4	....
Red-bellied Woodpecker	23	29	34	55	18	37	66	64	10	32	30	6	13	18	5	3	1	8	....
Red-headed Woodpecker	....	1	5	3	1	....	2	2	....	1	1	....	2	....	2	5	....	....	....
Yellow-bellied Sapsucker	1	4	8	11	1	5	7	8	5	7	5	5	5	11	....	1	....	4	....
Hairy Woodpecker	12	9	9	5	1	8	12	12	3	4	8	....	3	2	1	2	....	2	....
Downy Woodpecker	44	28	33	23	14	36	42	96	23	28	18	16	....	27	4	2	11	20	....

	1. Chincoteague	2. Cape Charles	3. Little Creek	4. Back Bay	5. Newport News	6. Hopewell	7. Brooke	8. Fort Belvoir	9. Charlottesville	10. Warren	11. Darlington Heights	12. Sweet Briar	13. Lynchburg	14. Big Flat	15. Rockingham Co.	16. Augusta Co.	17. Waynesboro	18. Three Ridges	19. Lexington	20. Peaks of Otter	21. Roanoke	22. Blacksburg	23. Glade Spring
Date	12/28	12/29	12/27	12/30	12/28	12/21	12/20	12/22	12/28	12/29	12/21	1/1	12/28	12/26	1/1	12/21	12/28	12/21	12/21	12/27	12/28	12/27	12/30
Eastern Phoebe	3	2	8	19	1	1	---	---	---	---	---	---	---	---	53	6	21	---	1	---	2	3	---
Horned Lark	55	206	---	11	3	6	---	4	---	30	50	---	---	---	---	---	---	---	7	---	---	9	---
Tree Swallow	64	---	---	---	114	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Blue Jay	14	47	161	57	54	52	215	262	49	24	48	39	57	11	14	46	21	4	97	6	49	136	18
Common Raven	---	---	---	---	---	---	---	---	---	1	---	---	---	12	3	---	1	1	1	---	---	---	---
Common Crow	1,330	75	279	192	36	195	415	341	82	97	136	30	130	8	175	586	4	7	179	8	366	176	48
Fish Crow	1,550	7	82	10	1	24	6	54	5	---	---	---	---	---	8	18	---	---	13	---	---	40	---
Black-capped Chickadee	---	---	---	---	---	---	---	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carolina Chickadee	107	156	114	77	29	85	150	256	49	70	49	26	104	67	20	18	18	19	61	16	179	182	4
Tufted Titmouse	41	10	45	19	44	33	40	168	34	39	23	12	40	29	23	11	15	8	43	13	53	146	2
White-breasted Nuthatch	10	5	3	3	---	11	16	61	9	9	7	14	10	12	11	16	5	17	20	19	25	106	---
Red-breasted Nuthatch	5	22	8	2	4	18	4	3	---	3	22	---	11	28	---	---	---	---	4	---	8	41	---
Brown-headed Nuthatch	16	69	11	39	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Brown Creeper	19	9	9	3	1	9	6	12	5	10	3	2	7	17	5	---	2	2	1	---	9	16	---
House Wren	3	19	2	8	---	---	1*	1*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Winter Wren	22	29	2	14	---	5	4	11	---	9	---	---	4	3	2	---	---	1	1	---	1	14	---
Bewick's Wren	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carolina Wren	41	75	57	50	51	67	60	83	7	6	1	15	35	4	1	3	2	1	13	---	3	10	1
Long-billed Marsh Wren	11	15	10	20	10	---	1	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Short-billed Marsh Wren	1	13	---	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Mockingbird	45	97	165	112	109	62	110	193	60	46	49	35	74	8	24	16	15	9	75	2	74	85	12
Catbird	9	9	4	38	1	---	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Brown Thrasher	3	12	19	20	6	---	1	1	---	---	---	---	---	1	---	1	---	---	1	---	---	2	1
Robin	185	317	32	594	20	8	36	13	4	4	---	---	2	14	1	2	---	5	26	---	---	2	---
Hermit Thrush	6	3	9	18	2	8	8	7	5	1	---	---	---	7	---	---	---	1	2	---	---	---	---
Swainson's Thrush	---	---	---	1*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Eastern Bluebird	16	5	13	70	---	14	38	1	---	5	5	---	---	---	---	---	---	5	6	13	---	---	---
Golden-crowned Kinglet	124	64	35	22	35	51	18	71	23	36	11	12	16	21	1	2	5	3	6	---	20	42	---
Ruby-crowned Kinglet	8	24	16	25	18	27	10	23	4	7	7	1	4	---	---	---	---	---	---	1	2	6	---
Water Pipit	42	1,414	---	61	---	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cedar Waxwing	---	19	14	55	41	13	225	48	38	2	1	---	22	1	---	---	---	---	12	---	---	---	---
Loggerhead Shrike	1	3	4	10	1	17	3	---	2	3	8	---	2	2	---	---	1	2	6	---	7	2	3
Starling	956	4,692	7,100	2,100	1,898	526	2,400	1,113	8,785	774	686	1,000	935,000*	5	1,926	1,940	701	75	1,295	6	1,706	7,377	300
Black-and-white Warbler	---	---	1*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Orange-crowned Warbler	4	---	---	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Myrtle Warbler	2,118	2,757	397	2,200	245	23	61	245	5	8	2	1	....	....	2	....	....	8	....	....	5	....
Pine Warbler	1	3	24	6	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Prairie Warbler	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Palm Warbler	5	61	11	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Northern Waterthrush	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yellowthroat	9	6	....	12	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Yellow-breasted Chat	....	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
House Sparrow	345	156	453	342	586	255	120	318	44	16	164	127	92	391	70	100	30	653	....	106	416	65
Eastern Meadowlark	220	298	155	485	85	97	100	5	62	56	105	12	5	1	47	5	....	41	....	19	58	5
Yellow-headed Blackbird	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Red-winged Blackbird	1,383	12,652	15,200	30,000	494	166	950	110	42	28	....	....	33,000*	....	....	....	....	....	....	1	22	....
Baltimore Oriole	....	....	1*	....	10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Rusty Blackbird	183	23	100	26	2	....	110	13	....	153	....	....	11,000*	....	2	....	6	....	....	....	9	....
Brewer's Blackbird	....	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Boat-tailed Grackle	175	1,516	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Common Grackle	457	73,197	17,800	6,426	43	....	15,000	....	1	151	9	....	88,000*	....	....	....	18	....	....	93	174	100
Brown-headed Cowbird	425	359	505	5,050	420	....	25	6	....	79	....	....	33,000*	....	....	....	5	....	....	23	1	....
Cardinal	244	388	193	206	144	197	280	412	91	145	74	62	118	35	30	24	28	14	93	3	215	167	48
Dickcissel	....	....	....	....	....	....	....	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....
Evening Grosbeak	89	476	29*	10*	57	5	150	269	25	101	14	10	77	8	21	63	29	3	33	93	119	3
Purple Finch	14	7	4	1	12	15	50	18	18	13	4	17	9	6	4	47	62	15
House Finch	2*	6*	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pine Siskin	121	636	395	307	202	4	5	89	....	....	5	....	20	....	....	....	....	2	....	30	26	....
American Goldfinch	407	408	252	707	238	125	180	203	54	54	129	28	1	9	7	5	28	4	23	71	110
Red Crossbill	....	15*	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	5	....
Rufous-sided Towhee	34	104	75	143	37	21	7	18	6	1	4	4	12	2	1	1	6	12	1
Ipswich Sparrow	5	5	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Savannah Sparrow	207	111	221	572	24	15	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Grasshopper Sparrow	....	2*	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Henslow's Sparrow	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sharp-tailed Sparrow	11	7	39	2	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Seaside Sparrow	5	10	10	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Vesper Sparrow	....	38	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lark Sparrow	....	....	....	1*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Slate-colored Junco	380	123	478	866	393	368	550	1,038	276	319	230	106	204	114	32	44	61	28	210	71	257	286	37
Tree Sparrow	19	3	5	15	15	55	84	26	14	9	31	50	2	3	3
Chipping Sparrow	6	12	8	8	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Field Sparrow	108	226	156	460	104	86	80	67	96	55	47	33	11	1	3	2	11	7	38	1
White-crowned Sparrow	2	2	10	20	75	7	59	2	11	35	3	13	31	134	24
White-throated Sparrow	1,395	1,465	787	1,134	514	271	350	557	148	74	41	73	168	2	37	9	9	10	59	91	51	5
Fox Sparrow	18	64	45	38	11	17	1	3	2	3	2	1
Lincoln's Sparrow	....	....	....	2*	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Swamp Sparrow	232	242	153	861	23	15	10	25	1	2
Song Sparrow	500	744	325	364	157	84	120	196	31	34	28	9	25	4	6	7	5	14	11	3	49	109	11
Snow Bunting	67	1	12	1*
Total Species	139	157	129	138	96	86	84	81	54	67	50	36	53	42	61	40	38	38	55	25	58	70	36
Total Individuals	33,372	132,753	67,440	120,750	15,837	18,179	24,088	8,924	10,459	3,044	2,164	1,821	1,101,511	630	3,896	3,030	1,174	315	3,423	197	4,215	10,863	959
Total Party-hours	108	88	64	99	44	39	69	67	40	30	20	20	49	16	25	9	14	9	40	16	51	81	5
Number of Observers	27	21	13	24	16	8	15	20	7	6	10	10	24	2	7	8	10	2	4	5	23	22	2



Figure 1. Locations of the 1968-69 Christmas bird counts in Virginia. The count numbers are the same as those used in the text and in Table 1.

there are several other state winter records. A Prairie Warbler and a Northern Waterthrush at Cape Charles were both "firsts" for a state count, and excellent warbler totals included 4 Orange-crowns at Chincoteague, 24 Pines at Little Creek, and 61 Palms at Cape Charles.

A Yellow-headed Blackbird at Little Creek was new to the count list, and a Brewer's Blackbird at Back Bay was only the sixth record for a Virginia count, the others being in 1954, 1959, 1960, and 1961. A Dickcissel was found at Warren, and the House Finch, which had been recorded only twice previously on state counts, was this year found on three counts, including both of the Eastern Shore ones. Northern finches were in excellent numbers, with 1684 Evening Grosbeaks reported on 22 of the 23 counts, far higher than any previous totals. The 2-year cycle of abundance started in the winter of 1955-56 was decisively broken. Pine Siskins also had the best flight on record, beating even the record year of 1952-53 when 545 were recorded on 10 counts. This year the total was 1842 on 13 counts, but the flight was mainly along the coast with Cape Charles alone reporting 636. Red Crossbills were reported on three widely separated counts, Cape Charles, Big Flat, and Blacksburg.

Sparrows provided a lot of interest this year, and 13 Ipswich Sparrows were reported on 4 of the 5 coastal counts. Grasshopper Sparrows were seen on both the Cape Charles and Little Creek counts, and a Henslow's Sparrow was noted at Chincoteague, the latter the second state count record. A Lark Sparrow at Back Bay was also only the second report for a Virginia Christmas count, the first being in 1962. A Chipping Sparrow, usually found fairly regularly in winter along the coast, was also reported this year at Charlottesville, 2 Lincoln's Sparrows were seen at Back Bay, and a Snow Bunting was found at Darlington Heights, the latter a rare winter bird inland.

1. Chincoteague National Wildlife Refuge (all points within a 15-mile diameter circle, center 2 miles north of center of Chincoteague as in previous 14 years; open farmland 10%, insular pine woodland 10%, mainland woodland 15%, scrub pine and myrtle thickets 9%, fresh-water marshes and impoundments 10%, salt marshes 25%, sheltered bays 16%, dunes 2%, sand flats and beaches 3%).—Dec. 28; 6:30 a.m. to 5:30 p.m. Overcast, fog, and intermittent rain till 4 p.m.; temp. 49° to 53°; wind SE to S, 10-35 m.p.h.; ground clear, much fresh water frozen in early a.m. but open by mid morning. Twenty-seven observers in 8 parties. Total party-hours, 108 (92 on foot, 11 by car, 5 by motorboat); total party-miles, 305 (76 on foot, 209 by car, 20 by boat). Observers: J. M. Abbott, Bill Ander-

son, H. T. Armistead, William Blakeslee, Danny Bystrak, Paul Bystrak, Robert Cherrix, W. L. Del Grande, P. A. DuMont, E. F. Folsom, J. P. Hailman, K. E. Hartel, Jonathan Higman, P. G. Kalka, E. M. Martin, E. T. McKnight, M. C. Newlon, J. W. Oberman, C. S. Robbins, G. C. Robbins, W. C. Russell, F. R. Scott (compiler), Napier Shelton, R. L. Smith, Jared Sparks, C. B. Swift, III, John Terborgh. The Common Tern was noted by Smith, who clearly saw the characteristic black circle around the back of the head. The House Finches, a first record for Virginia's Eastern Shore, were seen by Russell, who is quite familiar with the species, and the Henslow's Sparrow was carefully studied by Higman and Swift.

2. Cape Charles (all points within a 15-mile diameter circle, center 1.5 miles southeast of Capeville P. O. at south end of Dunton Cove; open bay 25%, salt marsh 20%, sheltered bay and mud flats 17%, open farmland 15%, open ocean and beach 10%, pine and mixed woodland 10%, towns 2%, fresh water 1%).—Dec. 29; 6 a.m. to 6 p.m. Fair and mild; temp. 35° to 55°; wind W to NW, 5-25 m.p.h.; ground clear, all water open. Twenty-one observers in 7 parties. Total party-hours, 88 (77 on foot, 7 by car, 4 by boat); total party-miles, 250 (65 on foot, 165 by car, 20 by boat). Seen in area count period, but not on count day: American Avocet. Observers: J. M. Abbott, H. T. Armistead (cocompiler), Mike M. Browne, M. A. Byrd, W. L. Del Grande, P. A. DuMont, J. P. Hailman, Jonathan Higman, Mr. & Mrs. Ernest Klussman, Dale M. Lewis, E. M. Martin, M. C. Newlon, W. C. Russell (cocompiler), F. R. Scott, Napier Shelton, Timothy Sniffen, J. W. Sparks, C. B. Swift, III, P. W. Sykes, J. W. Terborgh. The Cattle Egret was seen well by Browne, Lewis, and Sykes and the Common Eider by DuMont, Newlon, Higman, and Swift. The Black Rail was flushed from underfoot by Byrd, who had a clear view as it flew about 50 feet away. The 122 American Woodcock, an all-time U. S. record for a Christmas count, were reported by 5 of the 7 parties. The Prairie Warbler was carefully observed by Sparks and the Northern Waterthrush by Abbott and Sparks. The House Finches, first heard singing before being seen, were found by DuMont and Newlon, and the Red Crossbills were reported by Russell. Del Grande found one of the Grasshopper Sparrows, and the other was seen by Russell. The American Avocet was seen the day prior to the count by the boat-party guide, Linwood Horner, and described to Armistead. The pheasants reported were probably the introduced Japanese Green Pheasants, thought by some to be a separate species from the Ring-necked Pheasant.

3. Little Creek (all points within a 15-mile diameter circle, center 3.8 miles NE of Kempsville in Virginia Beach, to include Cape Henry, Lynnhaven Inlet, Little Creek, eastern portion of Norfolk city, Stumpy Lake; farmland 8%, pine woodland 10%, deciduous woodland 16%, salt marsh, beach, rivers, bay, and ocean 21%, suburbs 45%).—Dec. 27; 4:15 a.m. to 5 p.m. Clear; temp. 32° to 56°; wind SE to SW, 0-10 m.p.h.; ground bare, water open. Thirteen observers in 6 parties. Total party-hours, 64 (50 on foot, 14 by car); total party-miles, 378 (27 on foot, 351 by car). Observers: R. L. Anderson, M. M. Browne, Mrs. F. C. Burford, Mrs. M. R. Curtis, Miss G. A. Grimm, Miss V. W. Hank, D. M. Lewis, Mrs. D. W. Mediate, Mrs. V. A. Miller, Mrs. E. V. Moore, F. C. Richardson, W. F. Rountrey, P. W. Sykes, Jr. (compiler). The Green Heron was seen by Burford and Grimm, and the Black-and-white Warbler was carefully observed by Hank, Miller, and Moore. Burford and Grimm also reported the Yellow-headed Blackbird, a female, while the Baltimore Oriole, which had been present at a local feeding station since late fall, was noted by Mediate and Curtis. The Evening Grosbeak, previously quite unusual in extreme southeastern Virginia, was reported by two parties. The Grasshopper Sparrow was carefully observed in full sunlight with several Song Sparrows by Browne and Sykes.

4. Back Bay National Wildlife Refuge (all points within a 15-mile diameter circle, center 1.5 miles east of Back Bay, to include all of the refuge and much

of mainland of Virginia Beach; farmland 20%, pine woodland 10%, deciduous woodland 20%, beach and dunes 5%, marshes and brackish bay 25%, ocean 20%).—Dec. 30; 4:45 a.m. to 5 p.m. Clear; temp. 35° to 36°; wind N to NE, 8-15 m.p.h.; ground bare, water open. Twenty-four observers in 10 parties. Total party-hours, 99 (80.5 on foot, 17 by car, 1.5 by boat); total party-miles, 414 (66 on foot, 345 by car, 3 by boat). Observers: J. E. Ames, Jr., Mike M. Browne, Floy C. Burford, Marge R. Curtis, Mrs. C. W. Darden, Douglas S. and Dwight T. Davis, David D. Green, Anna B. and Gisela A. Grimm, Dale M. Lewis, Dorothy L. Mitchell, Richard H. Peake, Jr., Frank C. Richardson, C. J. Riddick, W. F. Rountrey, W. C. Russell, Dorothy H. Silsby, Elizabeth Stephens, Paul W. Sykes, Jr. (compiler), Phillip H. Warren, Romie L. Waterfield, Debbie White, Mrs. Lawrence White. The Cattle Egret was seen well by 4 members of the Rountrey party, and the Rough-legged Hawk, a dark-phase bird, was seen twice by Peake and Warren. The Parasitic Jaeger, an adult light-phase bird, was seen resting on the beach and in flight by Russell, and the Swainson's Thrush and Brewer's Blackbird were both reported by Peake and Warren. Excellent descriptions of all three of the above birds were submitted. The Evening Grosbeaks were reported by 3 parties, while the Lark Sparrow was seen at close range by the Burford party and the Lincoln's Sparrows by two different parties.

5. Newport News (all points within a 15-mile diameter circle bounded by Chesapeake Bay, Hampton Roads, James River, and Grafton; woodland 30%, fields 30%, fresh-water ponds 10%, waterfront 30%).—Dec. 28; 7 a.m. to 3:30 p.m. Rain a.m., clearing p.m.; temp. 40° to 55°; wind S to W, 5-35 m.p.h.; ground bare, water open. Sixteen observers in 6 parties. Total party-hours, 44 (26 on foot, 18 by car); total party-miles, 260 (31 on foot, 229 by car). Observers: E. Bell, H. Bell, M. A. Byrd, J. H. Grey, Jr., C. W. Hacker, Mr. & Mrs. W. R. Halsey, J. Hotchkiss, T. Hotchkiss, Mr. & Mrs. S. Mitchell, A. Rawls, E. Reed, D. Silsby, D. Smith, W. P. Smith (compiler). The Blue-winged Teals were reported by the Smiths and the Greater Yellowlegs by Hacker.

6. Hopewell (all points within a 15-mile diameter circle, center in Curles Neck as in last 14 years, to include Presquile National Wildlife Refuge, Fort Harrison, Curles Neck, Harrison Lake, Hopewell, Dutch Gap; open farmland 26%, brushy fields 10%, marshes and river shore 15%, deciduous wooded swamp 10%, woodland 39%).—Dec. 21; 6:15 a.m. to 5 p.m. Clear most of day; temp. 25° to 47°; wind N, 0-10 m.p.h.; ground bare, water mainly open. Eight observers in 4 parties. Total party-hours, 39 (30 on foot, 5 by car, 4 by motorboat); total party-miles, 171 (16 on foot, 130 by car, 25 by boat). Seen in area count period, but not on count day: Baltimore Oriole. Observers: John C. Fields, Margaret G. Finch, Abner Robertson, David K. Roszell, F. R. Scott (compiler), T. Roger Stone, Mary Tompkins, Henrietta Weidenfeld. The Osprey was seen by Finch, Tompkins, and Weidenfeld and compared to nearby gulls as it fed around a backwater off the river. The Least Sandpipers were found by Roszell and Scott where they had been seen previously during the winter.

7. Brooke (all points within a 15-mile diameter circle, center on road 3 miles ESE of Brooke, to include Potomac River from Widewater to Maryland Point Lighthouse and Virginia upland nearly to Fredericksburg; tidal water 14%, marsh 10%, deciduous wooded swamp 12%, fields 12%, hedgerows 6%, mixed forest edge 21%, deciduous woods 22%, pine woods 3%).—Dec. 20; 5:45 a.m. to 5:45 p.m. Cloudy until 9:30, then clear, haze over water in a.m.; temp. 27° to 52°; wind W to NW, 5-25 m.p.h.; ground bare, marshes and bay edges frozen, river open. Fifteen observers in 9 parties. Total party-hours, 69 (63 on foot, 6 by car); total party-miles, 126 (45 on foot, 81 by car). Observers: Roy Bailey, A. A. Baker, Henry Bell, III, J. H. Eric, Luna Leopold, R. G. Luedke, E. T. McKnight (compiler), B. A. Morgan, T. B. Nolan, D. W. Peterson, J. C. Reed, J. C. Reed, Jr., R. L. Smith, D. B. Stewart, A. M. White. The Double-crested

Cormorant was the last of a flock of 30 that had been seen earlier in the winter at Maryland Point Lighthouse. The House Wren was seen by Roy Bailey.

8. Fort Belvoir (all points within a 15-mile circle, center at Pohick Church, to include Fort Hunt, Mt. Vernon, Fort Belvoir, Lebanon, Mason's Neck, Woodbridge, Neabsco Creek, Burke Lake, and Springfield; tidal water 30%, deciduous woods 20%, pine woods 5%, pasture 8%, fields 8%, town suburbs 28%, cattail marsh 1%).—Dec. 22; 6:15 a.m. to 4:30 p.m. Overcast a.m., light rain p.m.; temp. 33° to 46°; no wind; ground bare, creeks and ponds partly frozen. Eighteen observers in 10 parties. Total party-hours, 67 (47 on foot, 20 by car); total party-miles, 224 (40 on foot, 184 by car). Observers: J. M. Abbott (compiler), Eleanor Beal, Charles D. Cremeans, Bill Del Grande, Phil DuMont, Mr. & Mrs. I. C. Hoover, W. A. Houston, Dan Keeney, Mr. & Mrs. E. Klussman, Alan Marks, Gale Monson, Jean Morse, Henry Myers, Pam Piper, Napier Shelton, George Sigel.

9. Charlottesville (all points within a 15-mile diameter circle, center near Ivy as in previous years).—Dec. 28; 7 a.m. to 5 p.m. Rain a.m., clearing and very windy p.m.; temp. 35° to 65°; wind SW, 0-40 m.p.h.; ground bare. Seven observers in 6 parties. Total party-hours, 40 (all on foot); total party-miles, 41 (31 on foot, 10 by car). Observers: Allen Hale, Constance Hale, Peter Mehring, Robert Merkel, Eilien Stephens, C. E. Stevens (compiler), Tom Wieboldt.

10. Warren (all points within a 15-mile diameter circle, center near Keene as in previous years).—Dec. 29; 7 a.m. to 5 p.m. Clear; temp. 26° to 40°; wind W, 0-10 m.p.h.; ground bare. Six observers in 3 to 4 parties. Total party-hours, 30 (29 on foot, 1 by car); total party-miles, 87 (37 on foot, 50 by car). Observers: Peter Mehring, Robert Merkel, Eilien Stephens, C. E. Stevens (nonparticipating compiler), Fred Whiteside, Lina Whiteside, Tom Wieboldt. The Dickcissel, new to this count, was seen by the Whitesides.

11. Darlington Heights (all points within a 10-mile diameter circle, center Darlington Heights Post Office; open fields 30%, hedgerows 20%, mixed woodland 10%, woodland edge 18%, lakes 2%, pine woodland 20%).—Dec. 21; 7:30 a.m. to 4:30 p.m. Clear; temp. 27° to 42°; wind gentle. Ten observers in 3 parties. Total party-hours, 20 (16 on foot, 4 by car); total party-miles, 94 (12 on foot, 82 by car). Observers: Vera Copple (compiler), Bill Dickenson, Louise Dillon, Edith Driskill, Hall Driskill, Ida Harvey, Gene Moore, Myriam Moore, Mattie Lee Scruggs, Margaret Watson. The Snow Bunting, seen by Copple, had been present at a feeding station since Nov. 20.

12. Sweet Briar (all points within a 3-mile diameter circle, center Sweet Briar College; open fields 15%, mixed deciduous forest 45%, creek bottoms 20%, around buildings and barns 15%, lakes 5%).—Jan. 1; 7:30 a.m. to 4:30 p.m. Partly cloudy; temp. 18° to 23°; wind gusting up to 35 m.p.h.; ground bare and frozen, lakes open except around edge. Ten observers in 3 parties. Total party-hours, 20 (19 on foot, 1 by car); total party-miles, 15 (9 on foot, 6 by car). Observers: Carolyn Bates, Vicky Bates, Mary Blackwell, Ernest Edwards, Mabel Edwards, Kay Macdonald, Gene Moore, Myriam Moore, Gertrude Prior (compiler), Harriet Rogers.

13. Lynchburg (all points within a 15-mile diameter circle, center Lynchburg College, to include James River, College Lake, Timber Lake, Pine Hill Lake; Tomahawk, Blackwater, Judith, and Opossum Creeks; Woodridge, Capron, and Burnbrae Farms; Blue Ridge Farms subdivision; Rivermont and Riverside Parks; mixed woods 30%, pine woods 8%, wooded residential areas 8%, creeks and river bottoms 25%, fields and pastures 20%, lakes 5%, parks 4%).—Dec. 28; 7:30 a.m. to 5 p.m. Rain in a.m., clearing in p.m.; temp. 50° to 62°; wind SE, 32 to 46 m.p.h.; ground bare, water open. Twenty-four observers in 6 parties. Total party-hours, 49 (38 on foot, 11 by car); total party-miles, 210 (31 on foot,

179 by car). Observers: Mrs. David Anthony, Frances Applegate, John Cacciapaglia, Vera Copple, John Cousins, Edith Driskill, Porter Echols, Elnora Hill, Roger Hill, Cam Jordan, Robin Jordan, Paul McQuarry, Wilda Menagh, Gene Moore, Myriam Moore (compiler), Cary Murphy, Phyllis Murphy, Rory Murphy, Gertrude Prior, M. B. Tillotson, S. L. Thornhill, Margaret Watson, Grace Wiltshire. The estimate of the blackbird population was made in the afternoon as the birds returned to the roost, with six groups stationed at vantage points around the area. The total roost population was estimated at 1,100,000.

14. Big Flat Mountain (all points within a 15-mile diameter circle, center on Pasture Fence Mountain as in previous years, mostly in Shenandoah National Park).—Dec. 26; 6:30 a.m. to 5:30 p.m. Cloudy; temp. 13° to 28°; wind E, 0-5 m.p.h.; ground bare. Two observers in 1 to 2 parties. Total party-hours, 16 (15 on foot, 1 by car); total party-miles, 42 (22 on foot, 20 by car). Observers: Robert Merkel, C. E. Stevens (compiler).

15. Rockingham County (all points within a 15-mile diameter circle, center at Ottobine, including Silver Lake in Dayton; lawn and shade trees in town 5%, cottonwood-sycamore river bottoms 5%, open farmland and farm woodlots 55%, mixed Appalachian conifers and hardwoods in mountains 35%; elevation 1160 to 3200 feet).—Jan. 1; 7 a.m. to 5 p.m. Clear; temp. 12° to 18°; wind W, 15-20 m.p.h.; ground bare, most water frozen. Seven observers in 3 parties. Total party-hours, 25 (8 on foot, 17 by car); total party-miles, 219 (16 on foot, 203 by car). Seen in area count period, but not on count day: Screech Owl. Observers: Max Carpenter (compiler), John Carpenter, John Derby, Bob Eggleston, Hollen Helbert, Harry Jopson, Charles Wright.

16. Augusta County (all points within a 15-mile diameter circle, center at Verona, to include Fort Defiance, Staunton, Frank's Mill; deciduous woods 25%, fields and pastures 45%, farmyards, orchards, and gardens 15%, towns 15%).—Dec. 21; 7:30 a.m. to 4:30 p.m. Partly cloudy; temp. 25° to 40°; wind NW, 5-10 m.p.h.; ground bare, most water open. Eight observers in 1 party. Total party-hours, 9 (4 on foot, 5 by car); total party-miles, 75 (5 on foot, 70 by car). Observers: Helen Angier, Kurt Kehr, Yu Lee Larner, John Mehner (compiler), Isabel Obenschain, James Sprunt, Betty Timberlake, Isabel Willson.

17. Waynesboro (all points within a 15-mile diameter circle, center near Sherando, including airport, golf course, South River, portion of Big Levels Game Refuge; wooded areas 40%, fields and pastures 30%, ponds and river bottoms 15%, residential areas 15%).—Dec. 28; 7 a.m. to 4:30 p.m. Rain in a.m., clear to partly cloudy in p.m.; temp. 55° to 54°; wind S, 15-35 m.p.h.; ground bare, water open. Ten observers in 1 to 3 parties. Total party-hours, 14 (10 on foot, 4 by car); total party-miles, 59 (6 on foot, 53 by car). Seen in area count period, but not on count day: Tree Sparrow. Observers: Monroe Couper, Hazel Dunlap, Mozelle Henkel, Yu Lee Larner, Jean Mehler, Arlene Moren, Isabel Obenschain, Karl Snyder, Ruth Snyder (compiler), Adeline Worsley.

18. Three Ridges (all points within a 15-mile diameter circle, center on Potatopatch Mountain, Nelson Co.; from Reed's Gap to summit of Three Ridges (3920 feet) to South Fork of Rockfish River (980 feet); hardwoods 75%, farmland 25%).—Dec. 21; 6:45 a.m. to 4:45 p.m. Clear; temp. 20° to 35°; wind W, 0-10 m.p.h.; ground bare. Two observers in 1 party. Total party-hours, 9 (mostly on foot); total party-miles, 24 (14 on foot, 10 by car). Observers: Allen Hale, C. E. Stevens (compiler).

19. Lexington (all points within a 15-mile diameter circle, center at Washington & Lee University; open farmland 30%, deciduous woodland 20%, cedar and pine woodland 25%, scrub 25%).—Dec. 21; 7 a.m. to 5 p.m. Clear; temp. 27° to 40°; no wind; ground bare and frozen, streams open. Four observers in 4

parties. Total party-hours, 40 (36 on foot, 4 by car); total party-miles, 43 (17 on foot, 26 by car). Observers: Mrs. Charles McKendree, J. J. Murray (compiler), R. O. Paxton, Joshua Womeldorf.

20. Peaks of Otter (all points within a 15-mile diameter circle, center at junction of Va. route 43 and Blue Ridge Parkway at Peaks of Otter, to include Peaks area north along parkway to Thunder Ridge and south to milepost 95; mixed deciduous woodland 80%, conifers 9%, open fields 10%, lake 1%; elevation 2000 to 3950 feet).—Dec. 27; 8 a.m. to 4 p.m. Clear in a.m., partly cloudy in p.m.; temp. 25° to 40°; wind SE, 0-20 m.p.h.; ground bare, ponds almost all frozen. Five observers in 2 parties. Total party-hours, 16 (10 on foot, 6 by car); total party-miles, 108 (18 on foot, 90 by car). Observers: Garst G. Bishop, Almon O. English, Ruskin S. Freer, Nay Hankins, Hugh Bell Muller (compiler).

21. Roanoke (all points within a 15-mile diameter circle, center Wasena Bridge; mixed deciduous and coniferous woods 56%, open fields 30%, suburban areas 6%, streams and ponds 8%).—Dec. 28; 7 a.m. to 5 p.m. Rain in a.m., clearing in p.m.; temp. 45° to 60°; wind S, 5-25 m.p.h.; ground bare, ponds and lakes partly frozen. Twenty-three observers in 10 parties. Total party-hours, 51 (30 on foot, 21 by car); total party-miles, 269 (29 on foot, 240 by car). Seen in area count period, but not on count day: Turkey, Red-headed Woodpecker. Observers: Charles Ames, Monte Barger, Gary Davis, Nora W. Davis, Gene Grubitz, Nay Hankins, Mr. & Mrs. Raymond T. Harper, Muriel P. Hegwood, Betty Hiles, Perry Kendig, William King, Mrs. Tracy Loyd, Carole Massart, Ernest E. Moore, Hazel S. Moore, Hugh Bell Muller (compiler), Sally Nelson, Judy Sims, Ronny Sower, R. J. Tabor, Jr., Ruth Venn, Jerry Via. Green Heron, Broad-winged Hawk, Osprey, and Pigeon Hawk were removed from the count list because of a complete lack of substantiating details.

22. Blacksburg (all points within a 15-mile diameter circle, center near Linkous Store as in past 33 years; pasture and plowed land 20%, town and suburbs 10%, mature white oak woodlots 20%, mixed pine and oak woods 20%, river and creek bottoms 30%).—Dec. 27; 6:30 a.m. to 5:30 p.m. Clear a.m., overcast with some rain p.m.; ground bare, ponds frozen, streams open. Twenty-two observers in 10 parties. Total party-hours, 81 (66 on foot, 15 by car); total party-miles, 198 (56 on foot, 142 by car). Seen in area count period, but not on count day: Yellow-bellied Sapsucker, Bewick's Wren, Fox Sparrow. Observers: Bob Abraham, Michael Abraham, Billy Akers, Don Cochran, Vickie Cochran, Clara Dickinson, Dick Dietrich, Kurt Dietrich, Maury Fincham, Maynard Hale, C. O. Handley, C. O. Handley, Jr., Martha Kline, Burd McGinnes, John Murray (compiler), Ruth Murray, Curt Roane, Martha Roane, Myron Shear, Ronald Shear, Connie Stone, Jim Whelan. The Whistling Swan was seen by C. O. Handley, Jr., on the New River both on the water and in flight. It was later seen Jan. 5 by John Murray.

23. Glade Spring (all points within a 15-mile diameter circle, center at junction of Routes 750 and 609; open fields and hedgerows 50%, river bottom land 40%, mixed deciduous and pine woods 8%, marsh and ponds 2%).—Dec. 30; 7:30 a.m. to 12:30 p.m. Clear; temp. 15° to 45°; wind NE, 0-5 m.p.h.; ground bare, water open. Two observers in 1 party. Total party-hours, 5 (2 on foot, 3 by car); total party-miles, 39 (1 on foot, 38 by car). Observers: Paul S. Dulaney (compiler), Jane D. White.

1968 BACK BAY TRIP

THELMA REESE

On 7 December 1968, 57 species of the Great Society of Virginia Ornithologists gathered at Sandbridge for the annual trek to Back Bay National Wildlife Refuge to see and record the Great Society of Living Flying Machines, who in spite of their reptilian ancestors, made it 150 million years before the Wright Brothers.

Back Bay Refuge consists of 4500 acres of marshland and an equal amount of water, and is one of the sanctuaries to wind the waterfowl as they travel on the compass of Faith along the Atlantic Flyway. They are lucky to have the ocean on one side and the bay on the other.

The local weatherman had forecast snow, sleet, or other frozen water, and so we were all swaddled and swathed beyond recognition and maneuverability, but the Great Weathermaker decreed otherwise and gave us a bright birding day. Roy Jackson of Virginia Beach was our trip leader.

Under the kind auspices of Don Ambrosen, Refuge Manager, and his Man Friday, Romie Waterfield, self-taught taxidermist, we entrucked to Back Bay along a sandy road bordered by myrtle bushes alive with madcap Myrtle Warblers, flashing their yellow rumps. Overhead the magnificent Kestrel, demonstrating every principle known to aerodynamics, was saying louder than words, "What took you so long with your helicoptering?"

On hand to greet us was a pond full of ducks and geese. But the cynosure of all eyes was a totally baldpated American Widgeon. Should the female of the species dig his exotic head-do, he may well be the proud progenitor of a new race of "Bald Pates." Not to be outdone, in their midst was a little Pied-billed Grebe, doing his own grebey up-and-down thing, to both his and our delight.

We walked over to the ocean and were rewarded by a flock of Gannets gleefully dive-bombing their prey. There were also Common Scoters, Red-breasted Mergansers, and—in the foreground—the snooty Common and Red-throated Loons sailed proudly past. The frolicking, brainy porpoises were displaying graceful savoir faire with great speed and poise. On the beach the skittering Sanderlings were playing hide and seek with the breaking waves—and always winning.

At lunch time we had the usual one-upmanship session as we spread ourselves out on the Meadowlarks' territory, who kept flying in and out in protest, showing their golden badges of authority, so I left them part of my lunch in appeasement.

On the land, on the sea, and in the air we had the great good fortune to see 72 species, each living with purpose, each specially designed and constructed for his own little niche. Most noteworthy, according to President Jim Eike, were (1) 20-25 Blue Geese—none of us had ever seen so many here; (2) 20 Bobwhite—just to show they did approve of the place; (3) Parasitic Jaeger—seen overhead at 20 feet by Ben Warfield, Jim Eike, and the Halseys, chasing an adult Ring-billed Gull; and (4) an Ipswich Sparrow—seen by Mrs. Colgate Darden and Bob Anderson.

Charlie Hacker observed that the Oystercatchers flying in a flock at this season of the year were notable, and he also commented on the total lack of Snow Buntings.

The bad weather caught up with us Sunday morning, and the Craney Island trip had to be called off because of snow and icy roads, the only time anyone could recall this happening.

5217 Lake Shore Road
Virginia Beach, Virginia 23455

VSO MATTAMUSKEET TRIP

DOROTHY L. MITCHELL

The sixth annual Mattamuskeet trip of the VSO was held from 31 January to 2 February 1969 at the Mattamuskeet National Wildlife Refuge in Hyde County, North Carolina. The refuge includes beautiful Lake Mattamuskeet, 30,000 acres in extent, with some 20,000 acres of surrounding wetlands. Fifteen miles long and 6 miles wide, the lake lies 3 feet below sea level, and its shallow waters average 2 to 3 feet in depth. Cypress trees form a border to the north, but other shores pass into low marshlands.

Headquarters, accommodations, and meals were at Mattamuskeet Lodge. This interesting building was remodeled from the old pumping plant of the New Holland agricultural operations which began about 1914 and drained the lake by an extensive system of canals so that the area could be put under cultivation. The initial promise of the venture did not pay off, and the area was purchased by the government for a waterfowl sanctuary in 1934.

All along the roadside going to Mattamuskeet, Sparrow Hawks and Bluebirds were seen on the wires and made us eager to arrive. About 45 VSOers were on hand for the evening meal at the Lodge; later they all gathered around the fireplace and viewed the exhibits of land and water birds, followed by an impromptu program of the Mitchells' latest bird pictures.

Posters were put up explaining the field trips for Saturday and Tripmaster Mike Mitchell further explained plans for Saturday.

We were aroused at 6:30 a.m. by the local bell ringer, had a working men's breakfast, and were off at 8:00 for our morning walk. It was cloudy and cool, but the birding was good and we had about 50 species before lunch time. Great numbers of Canada Geese, Snow Geese, Pintails, Widgeons, Ruddy Ducks, Purple Finches, Catbirds, Cedar Waxwings, and many others were seen. Back to the Lodge for a hearty lunch, then a short walk near the Lodge, where a Yellow-breasted Chat, Black-and-white Warbler, Brown-headed Nuthatch, Yellow-bellied Sapsucker, Hermit Thrushes, kinglets, and others were seen.

The trip to the western section of the lake area was highlighted by the sighting of the Bald Eagle, more water birds, and a Yellowthroat. A total of 73 species were seen on the refuge. Our guide was Ron Fowler, a refuge employee. On the way back to the Lodge, Gert Prior noticed a group of people standing around a car and stopped. She found out that a beautiful Bobcat had been trapped. Not knowing the fate of the animal, Gert then and there paid the man \$8 for it, box and all, and then got two rangers to go with her and release it about 5 miles away so it could enjoy its freedom again. Bouquets to Gert!

Following a big evening meal, which was enjoyed by all, we again gathered around the fireplace area to hear an illustrated talk about the refuge by John P. Davis, refuge manager. This was followed by a Bird Bowl Quiz conducted by the Tripmaster. Questions and answers made up an enjoyable evening, and lights were out about 10:30.

Rain greeted us Sunday morning and spoiled our trip to Nags Head. After another hearty breakfast, we packed up and headed east, hoping the rain would let up; but it seemed to get worse, so we headed home, satisfied with our bird list from Mattamuskeet.

596 Harpersville Road
Newport News, Virginia 23601

INCORPORATION OF THE VSO

ARTHUR H. FAST

In April 1930 the VSO was organized as an unincorporated association, and until recently has operated in that capacity.* At the annual meeting in April 1967 it was voted to incorporate. The President appointed the following committee on incorporation: Arthur H. Fast, Chairman, James W. Eike, Harry Frazier, III, and Ruskin S. Freer. Mr. Frazier, a practicing lawyer in Richmond, prepared and filed with the proper state authorities, on 28 June 1968, the Articles of Incorporation. On 9 November 1968 the Executive Committee of the old VSO met in Charlottesville to transfer the assets and activities to the new corporation of the same name. This was followed immediately by the organizational meeting of the Board of Directors of the corporation, which adopted a new set of by-laws; the Board also accepted the assets and activities transferred by the old VSO. The organization of the corporation was thus complete; it could now proceed to operate as a corporation. All legal services in connection with the incorporation were performed without charge.

Why the incorporation? Unlike the old VSO, the corporation can now take title to any property conveyed to it and can enter into agreements. Heretofore, persons of means have hesitated to make contributions to, or to set up trust funds for the benefit of, the VSO; nor were we able to make the usually persuasive arguments that such contributions were deductible for income tax purposes. Also, as soon as tax-exemption is granted to the corporation, we will be able to have our postal rates reduced, which on a yearly basis is a very substantial item.

Copies of the Articles of Incorporation and the By-laws will be mailed to any member upon request to the Secretary.

4924 Rock Spring Road, Arlington, Virginia 22207

CONSERVATION CORNER

ROBERT J. WATSON

The Virginia Society of Ornithology is one of a number of groups in Virginia whose objectives include conservation in the widest sense, i.e., the preservation of the natural environment, or as much of it as possible. Other organizations committed to this goal include the Virginia Wildlife Federation, the Izaak Walton League, the Nature Conservancy, and various others. It was inevitable that a need to harmonize the efforts of these groups, to enable them to focus their united strength on issues and problems related to conservation, would be recognized. A model for this purpose might be found in the Potomac Valley Conservation and Recreation Council, which, since its establishment in the early 1950's, has performed valuable work in exchanging and disseminating information among its constituent member organizations in Virginia, Maryland, and the District of Columbia.

In the latter part of 1968, a group of active conservationists in Virginia, on their own initiative, moved to meet the need for some kind of council or coordinating body for conservation organizations in Virginia. They arranged a meeting to be held in Charlottesville on 26 October 1968 to discuss the establishment of the new council. Invitations were sent to some 170 persons, as individuals or as representatives of various organizations. The writer, along with several other officers of the VSO, was among those invited but was unable to attend.

* For a history of the VSO, see "The VSO, 1930-1964" by J. J. Murray, *The Raven*, 35: 23-28 (1964).

Out of the meeting came an agreement to establish a permanent group to be known as the Conservation Council of Virginia. A Steering Committee, headed by Robert T. Dennis of Fairfax, was chosen to draw up a detailed plan of organization.

The Steering Committee has now drafted a set of proposed "by-laws" (actually a constitution) for the new Council, and has sent copies to the VSO and other interested organizations. The purpose of the Council, according to the draft, will be to provide an "effective and continuing coordinating structure" for a "program of cooperative action" directed toward the conservation and appreciation of natural and historic resources of the State. The Council will act as a clearing-house of information among member organizations, but its activities will be wider than that. It will, according to the by-laws, engage in "fact-finding and research"; will promote public understanding "through dynamic programs of information and education in conservation matters"; and will seek "cooperation, as appropriate, from local, state, and national agencies."

Membership in the new Council will be open to any statewide organization having aims and purposes "in harmony with the purpose of the Council," as determined by the Board of Directors of the Council. Individuals may also be admitted to membership by decision of the Board.

The Council will express its own position on conservation issues and will not attempt to commit its member organizations. The latter, according to the by-laws, may dissent from any Council position or action. Moreover, the Council will act as a representative for any participating organization when formally requested to do so, but not otherwise. It does not appear, therefore, that the activities of the Council will jeopardize the tax status of any member organization.

The Board of Directors of the Council will consist of the official delegates chosen by the member organizations. The officers—president, vice-president, secretary, and treasurer—will be chosen by the Board, which is also empowered to employ an executive director, at its discretion. No regular dues are to be charged; the Council will rely upon voluntary contributions.

Meetings of the Conservation Council of Virginia are to be held annually. The first one, at which it is expected that the new organization will be formally inaugurated, has been scheduled for 3-4 May 1969 at Skyland.

If the Council gets off the ground, it will fill an indispensable role, and the VSO, in this writer's opinion, would be well advised to establish its status as a member organization and thus to assist in this new and worthy enterprise.

2636 Marcey Road, Arlington, Virginia 22207

NEWS OF THE LOCAL CHAPTERS

Richmond Natural History Society

The second chapter of the VSO, the Richmond Natural History Society, meets regularly on the third Wednesday each month, September through April, at 8 p.m. at the Central National Bank branch at Thompson and Broad Streets (opposite the Seaboard Building) in Richmond. Members of other chapters are welcomed to attend anytime.

Following a precedent we established several years ago, we sponsor a camper—girl or boy—among our members (choice made by a contest requirement) which entitles the winners to two weeks at the Nature Camp at Vesuvius, Virginia. We have outstanding recruits, and we feel by this we have stimulated in them a far greater degree of interest in all or some of the natural sciences.

We are particularly interested in areas in the city that could become areas of pleasure and recreation, such as two large islands in the James River and that part of the city bordering the river or the Kanawha Canal which may be

partly destroyed by the expressway being planned along the river. The canal is historic and a thing of beauty, and it would be a tragedy if it were totally destroyed.

Field trips are sponsored once or twice a month to many rewarding places near Richmond, usually on a Saturday. Other longer week end trips are occasionally planned to such places as the Williamsburg area, Kiptopeke, and Cape Hattaras.—Margaret H. Coleman.

WOOD DUCK RECOVERIES SPAN 1100 MILES

VSO member George M. Smith, banding adult Wood Ducks in northern Shenandoah County, Virginia (the northern part of the Shenandoah Valley), has received 10 recoveries of his banded birds from Florida to southeastern Ontario, all presumably shot by hunters. These are tabulated in detail below.

<i>Band No.</i>	<i>Sex</i>	<i>Banded</i>	<i>Recovered</i>
676-71604	F	Dilbeck, Va. 05-04-66	Near Turbeville, S. C. 12-15-68
676-71605	M	Dilbeck, Va. 05-04-66	Near Rutland, Vt. 10-09-67
575-62242	M	Dilbeck, Va. 04-10-67	Near Tarboro, N. C. 01-06-68
575-62243	F	Dilbeck, Va. 04-10-67	Near Wagener, S. C. 12-?-68
575-62258	M	Dilbeck, Va. 04-15-67	Near Newberry, Fla. 11-23-67
575-62263	M	Strasburg, Va. 04-16-67	Near Lakefield, Ont. 09-23-67
575-62264	M	Dilbeck, Va. 04-16-67	Cranberry Bog, N. J. 10-19-68
575-62265	M	Strasburg, Va. 04-17-67	Near Barrie, Ont. 09-23-67
575-62275	M	Dilbeck, Va. 04-24-67	Near Mayfield, Pa. 10-12-68
575-62282	M	Dilbeck, Va. 04-29-67	Sugar Lake, Pa. 10-14-67

"HABITAT" IS WILDLIFE WEEK THEME

"Provide Habitat—Places Where Wildlife Live" is the theme of National Wildlife Week observance in Virginia and throughout the nation 16-22 March 1969, the Virginia Game Commission reports. The event is sponsored by the National Wildlife Federation and its state affiliate, the Virginia Wildlife Federation, which represents about 50 wildlife and conservation clubs in the State. The Virginia Society of Ornithology is one of the member clubs of the VWF.

Conservationists are concerned over the loss of wildlife habitat through urbanization, industrialization, and modern agricultural and forestry methods. Coupled with this trend are increases in pollution, litter, and physical damage to natural areas by people through vandalism, carelessness, or sheer numbers. The purpose of the 1969 Wildlife Week campaign will be to create an awareness of these losses in the hope that this trend can be stopped or at least slowed.

Officers, directors, and members of the Virginia Wildlife Federation along with game wardens and others in the conservation field will be in charge of local programs, exhibits, and other educational events during the week. Schools will be supplied with special classroom materials, speakers, and other assistance. The State Wildlife Week Chairman is Maynard A. Nichols of White Stone, Virginia, one of the VSO's representatives on the Board of Directors of the VWF.

WOODCOCK STUDY TO BEGIN IN VIRGINIA

Game biologists will be eavesdropping on the American Woodcock beginning in April as part of an attempt to learn more about the abundance of this secretive bird, reports Game Commission Game Research Biologist Jack V. Gwynn. The census technique involves driving over 80 separate 3.6-mile routes and making 2-minute stops each 0.4 mile to listen for calling Woodcocks. Those VSO members who have participated in the Breeding Bird Survey sponsored by the U. S. Bureau of Sport Fisheries and Wildlife will recognize this technique immediately.

The male Woodcock makes a sound called a "peent" followed by an aerial display and flight songs as part of its courtship procedure. The birds go through this courtship ritual early in the morning and late in the evening. The counts will be made during the evening period for convenience and uniformity.

According to the 1965-66 survey of Virginia hunters, there were 9153 who pursued the Woodcock, bagging 42,136 of them. This would make it the fifth most important game bird in the State. The extent of Woodcock range and migration patterns of the birds are not well known in Virginia. The study is being conducted on a standardized basis in all states where Woodcock occur under the supervision of the U. S. Bureau of Sport Fisheries and Wildlife, Migratory Bird Populations Station.

NEWS AND NOTES

GAME COMMISSION MOVES. The Virginia Commission of Game and Inland Fisheries has completed the transfer of its main office in Richmond from 7 North Second Street to the former Blue Cross building at 4010 West Broad Street, according to the Executive Director, Chester F. Phelps. The new facility provides expanded office areas and considerable parking space for employees and visitors. The Commission's new mailing address is P. O. Box 11104, Richmond, Virginia 23230.

FISHERMAN ISLAND TO BECOME WILDLIFE REFUGE. Fisherman Island, at the southern tip of Virginia's Eastern Shore, will become a National Wildlife Refuge. The U. S. Fish and Wildlife Service has completed an agreement with the U. S. Navy to lease this island on a more-or-less permanent basis. Fisherman Island is familiar to a number of VSO members as the only regular nesting site in Virginia of the Royal Tern. The new refuge will be under the jurisdiction of the manager of Back Bay National Wildlife Refuge.

EARED GREBES REPORTED AGAIN. There were two more reports of Eared Grebes in Virginia in late 1968. At Craney Island, in southern Hampton Roads, where most of the Virginia birds have been found, another bird was seen on 11 November 1968 by M. A. Byrd and Robert Kennedy. Another was reported at Dyke marsh, Fairfax County, on 3 December 1968 by Jackson M. Abbott and on 8 December by Jonathan Higman.

EUROPEAN WIDGEON AT CHINCOTEAGUE. According to Carl W. Carlson, 3 male European Widgeon were seen at Chincoteague National Wildlife Refuge on 20 October 1968 by Kevin Mullin, Morton Levy, and Kay Stewart.

GOLDEN PLOVERS IN 1968. Golden Plovers were reported in three localities in the state last year. One in breeding plumage was seen at Back Bay National Wildlife Refuge on 25 May 1968, a very unusual spring record (P. A. Buckley, R. G. Fisher, and R. L. Scully). In the fall, 3 were seen at Chincoteague on 24 August 1968 (C. W. Carlson) and 9 at Curles Neck, eastern Henrico County, on 6 October 1968 (F. R. Scott).

BUFF-BREASTED SANDPIPERS AT CHINCOTEAGUE. C. W. Carlson reported a startling 6 Buff-breasted Sandpipers at Chincoteague on 24 August 1968. This is surely a record count for Virginia.

GODWITS IN THE FALL MIGRATION. Up to 3 Marbled Godwits were seen at Chincoteague between 16 August and 26 October 1968 (C. W. Carlson, F. R. Scott, and others), and Hudsonian Godwits were reported here between 11 August (7 birds—Gale Monson) and 21 September 1968 (Carlson). Another Hudsonian Godwit was seen on Cedar Island on 2 August 1968 (M. A. Byrd and G. W. Hall).

AVOCETS AGAIN IN VIRGINIA. The American Avocet continues to be reported with more frequency in the state. In 1968 the only spring report was one at Back Bay National Wildlife Refuge on 18 April 1968 (D. R. Ambrosen). After the nesting season 2 were first reported at Craney Island on 23 July 1968 (F. G. Buckley and P. A. Buckley), and 17 were seen here on 6 August (M. A. Byrd and Tom Wieboldt). Apparently, they remained here all fall and were last reported on 29 November (9 birds—Byrd and Robert Kennedy). At Chincoteague they were first noted on 3 August 1968 (Byrd and G. W. Hall), and up to 20 birds were seen by many observers until mid November (E. F. Folsom and others).

LATE BLACK-AND-WHITE WARBLER. C. E. Stevens reports that on 9 November 1968, while walking along upper Jeremys Run in the Blue Ridge of Page County, he and Bruce Davenport were much surprised to discover—in a troop of Carolina Chickadees, Tufted Titmice, Golden-crowned Kinglets, and Downy Woodpeckers—a single Black-and-white Warbler (*Mniotilta varia*). "The bird certainly appeared out of place in the wintry woods, and this incongruity was especially impressed upon us as it began to snow before we reached our car. While there are later fall (and even winter) records for the Coastal Plain of the mid Atlantic states, its occurrence at this season in upland Virginia is extraordinary."

SWAINSON'S WARBLER BANDED AGAIN. Mrs. Dorothy Mitchell trapped and banded her second Swainson's Warbler at Newport News on 27 August 1968. The first one had been caught on 15 May 1966 (*Raven*, 37: 56, 1966).

TRANSIENT WARBLERS OFFSHORE. While engaged in ship trials in the Atlantic Ocean off Chesapeake Bay, C. W. Hacker observed some early migrant warblers that came aboard his ship. On 30 July 1968 a Northern Waterthrush came aboard while the ship was 15 miles east of Cape Henry, and the following day a Yellow-throated Warbler appeared some 40 to 50 miles out. Finally, a Yellow-breasted Chat came aboard on 21 August 1968 some 40 miles east of Cape Henry.

The Raven

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Courtesy of Walter Weber

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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 quarterly, containing articles about Virginia ornithology, as well as news of the activities of the Society and its chapters.
4. 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 \$1.00 for junior members (students), \$2.00 for active members, \$4.00 for sustaining members, \$50.00 for life members.

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VIRGINIA'S FIRST WINTER AVOCETS AT CAPE CHARLES AND NOTES ON OTHER WINTER SHOREBIRDS OF THE DELMARVA PENINSULA

HENRY T. ARMISTEAD

On 29 December 1967, while participating in the third Cape Charles, Virginia, Christmas bird count, John W. Terborgh and the writer observed the following shorebirds feeding at low tide in the early afternoon on the extensive mud flats in the vicinity of south Mockhorn and Smith Islands: 170 American Oystercatchers, 2 Whimbrel, 15 Willets, 42 Marbled Godwits, and 2 American Avocets. The avocets represent the first winter sight record for the state; the godwit count is an all-time high for Virginia; the Whimbrel are the fifth winter record.

The person primarily responsible for locating these birds was our guide, Linwood Horner, a waterman of Capeville, Virginia; he had recognized the avocets and godwits previously, describing them as "white curlew" and "straight-billed curlew," respectively. We easily approached the avocets in our boat to within about 20 feet while they were busy feeding; they were remarkably tame and seemed indifferent to our presence. The godwits were in the same area, scattered about in loose groups; we watched them carefully through a 25x scope as they fed at a distance of several hundred yards.

The presence of these and other shorebirds in the Cape Charles area in winter is notable (see Table 1) since some of the occurrences represent record numbers for the state or are comparatively recent indications that certain species have been increasing or at least have been observed more frequently as winter residents in the Delmarva region, especially since about 1960. With the establishment of the Cape Charles count in 1965 by William C. Russell, an hitherto unsuspected abundance of winter shorebirds has been recorded.

It may be argued that with each passing year observers become increasingly familiar with their areas in the Christmas count circles and discover where certain species may be depended on being observed. This may account for recent increases in the number of sight records for certain species. However, most shorebirds are conspicuous and frequent open areas where they can readily be seen. It therefore seems very doubtful that the increase in records for these birds is due solely to the fact that some bird watchers are becoming more familiar with the areas they cover.

Among the shorebirds that seem to be occurring more frequently or in greater numbers during the winter on the Virginia Eastern Shore and elsewhere along the coast of the Delmarva Peninsula are the following: American Oystercatcher, Ruddy Turnstone, Whimbrel, Willet, Knot, and Marbled Godwit. It is within the last 10 years or so that these species have started to occur or increase as winter residents. It will be interesting to see if this is the beginning of a real trend and whether these birds will continue to increase.

The following annotations document some of the occurrences for the above-mentioned birds as well as some other species. All of the records between 20-31 December were made on Christmas bird counts and may be found in the appropriate April issues of *Audubon Field Notes*. Full citations have been given for all other records, most of which are mentioned in this same journal. A key to the initials of observers appears at the end of this article before the list of references.

American Oystercatcher. The 210 American Oystercatchers seen on 29 December 1967 appear to be among the higher Virginia counts. There are at least two higher counts: an amazing total of 430 at Cobb Island on 2 September

Table 1. Shorebirds recorded on the first four Christmas bird counts at Cape Charles, Virginia, on 30 December 1965, 30 December 1966, 29 December 1967, and 29 December 1968. Numbers in italics represent unusual counts.

<i>Species</i>	1965	1966	1967	1968
American Oystercatcher (<i>Haematopus palliatus</i>)	196	69	210	144
Semipalmated Plover (<i>Charadrius semipalmatus</i>)	15	-	-	1
Piping Plover (<i>Charadrius melodus</i>)	1	7	4	-
Killdeer (<i>Charadrius vociferus</i>)	73	93	21	98
Black-bellied Plover (<i>Squatarola squatarola</i>)	311	654	715	716
Ruddy Turnstone (<i>Arenaria interpres</i>)	96	130	88	16
American Woodcock (<i>Philohela minor</i>)	3	109	47	122
Common Snipe (<i>Capella gallinago</i>)	2	11	15	26
Whimbrel (<i>Numenius phaeopus</i>)	-	4	2	1
Willet (<i>Catoptrophorus semipalmatus</i>)	33	19	15	46
Greater Yellowlegs (<i>Totanus melanoleucus</i>)	48	42	31	22
Lesser Yellowlegs (<i>Totanus flavipes</i>)	3	2	5	6
Knot (<i>Calidris canutus</i>)	-	-	18	-
Purple Sandpiper (<i>Erolia maritima</i>)	-	-	1	1
Least Sandpiper (<i>Erolia minutilla</i>)	1	49	8	5
Dunlin (<i>Erolia alpina</i>)	12,089	15,859	6851	5609
Dowitcher (sp.) (<i>Limnodromus</i> sp.)	1	6	1	1
Semipalmated Sandpiper (<i>Ereunetes pusillus</i>)	176	103	69	423
Western Sandpiper (<i>Ereunetes mauri</i>)	13	2	7	2
Marbled Godwit (<i>Limosa fedoa</i>)	-	38	42	-
Sanderling (<i>Crocethia alba</i>)	68	522	252	82
American Avocet (<i>Recurvirostra americana</i>)	-	-	2	-

1951 (reported by TRH in Potter and Murray, 1952) and 245 seen on the north end of Assawoman Island on 5 September 1960 (AEW, Scott and Cutler, 1961a). However, the 1965, 1967, and 1968 totals seem to be record winter counts. The highest total for the Chincoteague Christmas count was

115 on 29 December 1966. Oystercatchers were first seen on the Chincoteague count in 1959, but it is only within the last few years that they have been found to occur in Maryland during the winter along Chincoteague Bay and near Ocean City. These are itemized in Table 2.

Table 2. Maryland winter records of American Oystercatchers.

Number	Locality	Date	Observers
2	West Ocean City	19 Feb. 1961	PAD <i>et al.</i> (Scott & Cutler, 1961b)
2	Ocean City	12 Feb. 1966	STB (Scott & Cutler, 1966)
1	West Ocean City	5 Feb. 1967	HK (Robbins, 1967)

Another remarkable record and possible indicator of the northward extension of the winter range of this species is a "fresh specimen of a dead bird" found at Beach Haven, New Jersey, on 26 February 1962 (RCF, Scott and Cutler, 1962).

Black-bellied Plover. The Black-bellied Plover counts of 654, 715, and 716 (30 December 1966, 29 December 1967, and 29 December 1968, respectively) at Cape Charles seem to be record winter counts for the state. The next highest total I can find is 352 seen on the Chincoteague count of 1957. Perhaps these represent the highest counts for the state at any time of year.

Table 3. Number of Ruddy Turnstones seen on Christmas counts at Cape May, New Jersey, Ocean City, Maryland, and Chincoteague, Virginia, from 1954 to 1968.

	1954	55	56	57	58	59	60	61	62	63	64	65	66	67	68
Cape May	1	2	0	1	1	6	9	1	4	24	2	28	18	60	51
Ocean City	0	0	0	1	0	0	0	7	7	20	2	17	11	156	68
Chincoteague	0	0	0	5	9	35	3	30	25	27	28	27	54	26	20

Ruddy Turnstone. The Ruddy Turnstone is another species which has occurred in unprecedented numbers during the winter at certain localities on the Delmarva Peninsula. Table 3 shows the remarkable increase in the numbers of these birds seen on three Christmas counts from 1954 to 1968.

The Cape Henlopen-Primehook, Delaware count, which began in 1964, has also recorded good numbers of these birds in winter, and its totals for the first four years of its existence are 31, 44, 53, and 40 birds, respectively. In this context the 1965-1967 totals of 96, 130, and 88 at Cape Charles are noteworthy, and they appear to represent record winter counts for the state of Virginia.

American Woodcock. A count of a dozen or so woodcock is usually considered high during winter on any of the Delmarva Christmas counts. Not very often have higher counts been obtained. However, in recent years unprecedented winter counts of these birds have been made at Cape Charles with a peak of 122 in 1968 (see Table 1). The 1966 and 1968 totals represent all-time national highs for Christmas counts. Cape May, New Jersey, with which Cape Charles is often compared in terms of the fall migration, has only recently had high totals of woodcock on its Christmas counts. Cape May is noted for its large migrations of these birds, which usually take place in November. Do the Cape Charles figures represent the tail end of this migration, or are they truly winter resident birds? Table 4 bears witness to the recent increase of woodcock during the winter at Cape May.

Table 4. Number of American Woodcock seen on Christmas bird counts at Cape May, New Jersey, from 1954 to 1968.

1954	55	56	57	58	59	60	61	62	63	64	65	66	67	68
8	8	2	6	6	4	15	13	45	68	10	23	76	10	33

The only Delmarva Christmas count total approaching the number of these birds seen at Cape Charles or Cape May is a count of 33 on the Denton, Caroline County, Maryland, count of 21 December 1963. Another recent total of 20 on the count of 27 December 1968 at Ocean City, Maryland, was a record high for the area in winter.

Whimbrel. Recent Whimbrel winter records for Virginia are given in Table 5.

Table 5. Winter records for Wimbrels in Virginia.

Number	Locality	Date	Observers
1	Chincoteague	13 Dec. 1959	TWM (Buckley & Buckley, 1967)
2	Chincoteague	27 Dec. 1963	JMA, FGS, <i>et al.</i>
1	Chincoteague	29 Dec. 1965	DFA, JMA, PAD, & PGD
4	Cape Charles	30 Dec. 1966	PAB, JWS, JWT, & HTA
2	Cape Charles	29 Dec. 1967	HTA & JWT
1	Cape Charles	29 Dec. 1968	HTA & JWT

This appears to be another species that may reasonably be suspected to be of almost regular occurrence on the Eastern Shore of Virginia in the winter, especially if the weather remains mild. Our guide, Linwood Horner, indicated that he has seen them regularly in the late fall and early winter for the last few years around Cape Charles. The relevancy of these Virginia winter records may be judged from the *A. O. U. Checklist* (1957), which describes the winter occurrence of *Numenius phaeopus hudsonicus* as "rarely on the coasts of Texas, Louisiana, and South Carolina" and does not list any other localities in the eastern United States. Another interesting record of Whimbrel in winter is a report of 30 seen at Wilmington, North Carolina, on the count of 27 December 1954.

Willet. Willets have only recently turned up with any frequency along the Virginia coast in winter. The first Maryland winter record was one seen on the Ocean City count of 30 December 1958 (JVD, JEW). In 1960 they appeared on the Chincoteague count for the first time, and some were seen each year afterwards until 1965, the highest total being 4 in 1960. At Cape Charles the record winter count of 46 was obtained on 29 December 1968 (see Table 1). Such numbers suggest strongly that Willets occur regularly at Cape Charles during the winter months.

Knot. Table 6 gives the only winter sightings for Knots which I can find for Virginia, Maryland, and Delaware. The recency of the Knot as a winter resident in the area may be judged from these records. However, this species is not as familiar to many observers as some of the others here discussed and is more easily confused with other birds, especially with Black-bellied Plovers and Sanderlings. These birds may therefore have been either overlooked or misidentified. However, the concentration of records for them in the last 10 years, and the nearly complete lack of them previous to this during the winter, indicate that they may be increasing as winter residents on the Delmarva coast.

Table 6. Winter records for Knots in Delaware, Maryland, and Virginia.

<i>Number</i>	<i>Locality</i>	<i>Date</i>	<i>Observers</i>
15	Seaford, Va. ^a	21 Jan. 1951	RB (Potter & Murray, 1951)
8	Back Bay, Va.	28 Dec. 1957	PWS <i>et al.</i>
5	Ocean City, Md. ^a	30 Dec. 1957	DAC, WCR, & HTA
10	Chincoteague	29 Dec. 1959	JMA & LCG
5	Ocean City	27 Dec. 1961	FGS, CDH, & MG
52	Chincoteague	29 Dec. 1966	
5	Ocean City	27 Dec. 1967	WCR & HTA
7	Chincoteague	28 Dec. 1967	WCR, HTA, <i>et al.</i>
18	Cape Charles	29 Dec. 1967	JWT, HTA, <i>et al.</i>
3	Ocean City	27 Dec. 1968	HTA, WCR, & JWS
1	Rehoboth, Del. ^a	28 Dec. 1968	

^a First state winter records.

Dunlin. The remarkable counts (estimates) of Dunlin around Cape Charles are probably due to a combination of mild latitude and the immense areas of exposed mud flats which stretch for miles along countless tidal creeks and inlets. An accurate count of Dunlin in this area is difficult because of the expansive areas they frequent, the difficulty of access to these, the birds' constant movement, and their tendency to disperse widely over the flats rather than to concentrate in groups. Therefore the figures for the four Cape Charles counts are largely based on estimates. It would be interesting to speculate on how many thousands of these birds could be counted if all of the count area with its barrier beach islands, tortuous channels, and many square miles of mud flats could be thoroughly covered by several boat parties. F. R. Scott (personal communication) has suggested that a more reasonable way to estimate their numbers would be by locating roosts of Dunlin at high tide, but so far none of these has been located which is of an appreciable size. The estimates of 12,089, 15,859, 6851 and 5609 Dunlin (1965-1968 counts respectively) seem to be high winter counts for Virginia, or possibly for any season. A count of 3460 was made on a Christmas count at Cobb Island on 28 December 1955 (FRS, CCS). Chincoteague's high tally is 3308 on the 1957 count.

Semipalmated Sandpiper. The 423 Semipalmated Sandpipers seen in 1968 at Cape Charles are a record winter count for Virginia. Of these, 350 were in a single group. Other high winter counts for this species include 399 at Chincoteague on 29 December 1966, 176 at Cape Charles on 30 December 1965, and 122 at Chincoteague on 29 December 1959. No other winter counts anywhere on the Delmarva Peninsula approach these totals.

Marbled Godwit. The 1967 Cape Charles count total of 42 Marbled Godwits is closely approached only by one other remarkable total of 38, seen repeatedly in one group from an airplane in the same area as the 1967 birds in 1966 by William C. Russell, organizer and compiler of the Cape Charles count. A search of the literature reveals no totals near to these two at anytime of year for hundreds of miles. However, 16 were seen at Chincoteague on 7 September 1954 (JWT, JEK, RRK, Potter and Murray, 1955). The highest totals for Massachusetts, the New York City area, and New Jersey for this century seem to be 8, 22, and 30 respectively (Griscom and Snyder, 1955; Bull, 1964; Potter and Murray, 1956). Older references are vague, but it is probably reasonable to conjecture that these birds formerly occurred in numbers at least comparable to the larger groups reported here. According to Rives (1890), Marbled Godwits in Virginia were "formerly common, now rare, on the eastern shore in the migrations."

They were first seen on the Chincoteague count of 27 December 1957 (PAD, WN, JWT, JSW). The first Maryland winter record was one seen with a flock of Black-bellied Plover on the Ocean City count of 30 December 1958 (HTA, JAB, GK). Other recent records include 3 at Ocean City on 27 December 1967 (VK, RA) and 4 at Chincoteague on 29 December 1966 (JHG, FRS, WSC). Godwits were seen at Brigantine Refuge, New Jersey, on 1 December 1957 (1 by SJM, Potter and Scott, 1958), 31 December 1966 to mid January 1967 (6 by GH & WM, Scott and Cutler, 1967; Merritt, 1968), at Absecon, New Jersey, on 18 January 1962 (1 by AJ, Scott and Cutler, 1962), and at Beach Haven Inlet, New Jersey, on 2 December 1956 (1 by DAC, CS, Potter and Murray, 1957). With this many recent winter records from further north it is not surprising to find Marbled Godwits at Cape Charles at this time of year. What is unexpected is to find them there in such numbers. It seems likely that they may now be regular winter residents in the Cape Charles area and perhaps elsewhere on Virginia's Eastern Shore, although the failure to find them on any of the 1968 counts does not support this. Our guide, Linwood Horner, who knows shorebirds well, indicates he sees them regularly well into December in the Smith Island and Mockhorn Island area. The A.O.U. *Check-list* (1957) defines their winter range as extending from "South Carolina, Georgia, and Florida south . . ."

American Avocet. The presence of American Avocets in winter in Virginia is not altogether surprising. At nearby Deal Island, Maryland, 1 was seen on 11 December 1941 (TD, Stewart and Robbins, 1958). As early as 1951, 1952, and 1954 avocets lingered well into November at Bombay Hook Refuge, Delaware, Chincoteague, and Fortescue, New Jersey (MOS, EOM, BKM, Potter and Murray, 1952, 1953, and 1955). One was still at Bombay Hook in mid December 1965 (CMH, personal communication). Thirty-four were observed on the Bodie-Pea Island, North Carolina, Christmas count of 28 December 1965, and 38 were there on 31 December 1967 (PWS *et al.*). These birds have been of practically regular occurrence during the late summer at Brigantine Refuge, New Jersey, and Bombay Hook, as well as occurring at other widely scattered localities on the Delmarva Peninsula since the early 1950's. At Bombay Hook, 101 were seen on 10 September 1967 and "over 200 avocets were reported on the refuge by the end of September" (DuMont, 1968). The number of avocet records has been increasing steadily since the 1950's, and the present Virginia winter record seems to fit well into the pattern of their recent Delmarva and southern New Jersey occurrences.

Formerly they bred at Cape May (Stone, 1937), where Alexander Wilson found them in the early 1800's. It remains to be seen if avocets will become firmly established in the middle Atlantic coast region. It is interesting to notice that the *A. O. U. Checklist* (1957), based predominantly on specimens, does not describe the American Avocet as a regular migrant or winter resident anywhere on the Atlantic coast ("In migration . . . rarely or casually eastward to the Atlantic coast from New Brunswick to Florida"). If it continues to occur regularly in the New Jersey-North Carolina coastal area, perhaps a revision of its status will be considered.

Key to the Initials of Observers

DFA—D. F. Abbott; JMA—Jackson M. Abbott; RA—Ralph Andrews; HTA—Henry T. Armistead; RB—Ray Beasley; JAB—Joseph A. Beatty; STB—Seal T. Brooks; PAB—Paul A. Buckley; CWC—Carl W. Carlson; WSC—William S. Clark; DAC—David A. Cutler; TD—T. Denmead; JVD—John V. Dennis; PGD—Paul G. DuMont; PAD—Philip A. DuMont; RCF—R. C. Frohling; MG—Mel Garland; JHG—J. H. Getgood; LCG—Luther C. Goldman; CDH—C. Douglas Hackman; TRH—T. R. Hake; CMH—Clay M. Hardy; GH—J.

George Hitchner; AJ—Allston Jenkins; HK—Hank Kaestner; RRR—R. R. Kerr; VMK—Vernon M. Kleen; GK—Gordon Knight; JEK—J. Ellsworth Knudson; ML—Marcia Lakeman; TWM—T. W. Martin; MOS—Maryland Ornithological Society; BKM—B. K. Matlack; EOM—E. O. Mellinger; WM—William R. Middleton; SJM—S. J. Mulligan; WN—William Noble; WCR—William C. Russell; FGS—Francis G. Scheider; FRS—F. R. Scott; JWS—Jared W. Sparks; CS—Clarence E. Stasz; CCS—Charles C. Steirly; PWS—Paul W. Sykes, Jr.; JWT—John W. Terborgh; AEW—A. E. Weinrich; JWS—John S. Weske; JEJ—John E. Willoughby.

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HOUSE SPARROWS TAKE OVER A FLICKER NEST HOLE

JACKSON M. ABBOTT

In May 1963 a male Yellow-shafted Flicker, *Colaptes auratus* (Linnaeus), excavated a nest hole in a dead Sweetgum tree in my back yard. I watched him daily as he worked on the hole but did not see a female. After about 5 days the hole was completed, and the Flicker disappeared for nearly a week. During his absence a pair of House Sparrows, *Passer domesticus* (Linnaeus), built a nest in the hole and apparently had it finished when the male Flicker returned with a mate.

I happened to be in the yard when the Flickers arrived to resume occupancy of their nest hole and witnessed the following incident, all of which took place in a period of about 20 minutes. The sparrows were absent when the Flickers arrived. The male Flicker flew to the hole and perched beside it, apparently "showing" it to the female. The female flew to the hole, went in, and immediately came back out. She looked at the male and uttered a few low notes as if to say, "What gives with all the straw and paper stuffed in the hole?"

The female perched on a nearby limb while the male went to the hole and began throwing the sparrows' nest out by the bill-full. He took at least 15 minutes to empty the hole and then came out to let his mate re-enter. While she was inspecting the now empty hole, the sparrows arrived and, with much chattering and fussing, tried to get into the hole. The female Flicker came out and was immediately set upon by the sparrows, forcing her to a nearby tree. The commotion attracted four more House Sparrows, which joined the first pair in harrassing the Flickers and actually succeeded in chasing both Flickers out of the area!

The Flickers never returned, and the sparrows rebuilt their nest in the hole and raised a brood.

I have seen a pair of both Red-headed and Red-bellied Woodpeckers driven from their nest holes by Starlings, *Sturnus vulgaris* Linnaeus, but have never before seen Flickers ousted from their hole by another species of bird.

8501 Doter Drive, Alexandria, Virginia 22308

THE 1969 VSO ANNUAL MEETING

MITCHELL A. BYRD

The 1969 annual meeting of the Virginia Society of Ornithology was held jointly with the fiftieth annual meeting of the Wilson Ornithological Society at the College of William and Mary, Williamsburg, Virginia, from Thursday, 1 May, to Sunday, 4 May 1969. The meeting was sponsored by the College. All regular sessions and the business meeting of the VSO were held in the John Millington Hall of Life Sciences. Total registration for the meeting was 284, of which 104 were VSO members.

Members of the Local Committee on Arrangements consisted of Mitchell A. Byrd, Chairman, Mrs. Alfred A. Armstrong, Mr. and Mrs. Paul Baker, Mrs. S. M. Beck, Mrs. Mitchell A. Byrd, Dr. and Mrs. G. W. Hall, Dr. and Mrs. John H. Grey, Jr., Charles Reeder, and Mr. and Mrs. Sydney Mitchell.

Friday Morning Session

The first papers session on the morning of 2 May was preceded by a welcome on behalf of the College by Dr. John H. Willis, Jr., Assistant Vice President,

who was introduced by Mitchell A. Byrd. Response was made on behalf of the societies by Dr. H. Lewis Batts, President, The Wilson Ornithological Society.

The Origin of Seabird Colonies

Bertram G. Murray, Jr., Michigan State University

Breeding Behavior of the Roadrunner, *Geococcyx californianus*

Martha A. Whitson, University of Oklahoma

Nesting Behavior of Two Species of Arboreal Sandpipers

Lewis W. Oring, The University of North Dakota

Friday Afternoon Session

The Relationships and Evolution of the *Dendroica coronata* Complex

John P. Hubbard, Rockbridge Alum Springs Biological Laboratory

A Population Study of Robins in an Urban Community

Debora V. Howard, Massachusetts Audubon Society

Home Range of the Shiny Cowbird (*Molothrus bonariensis*)

Nicholas L. Cuthbert, Central Michigan College

Nesting-range Extension by the Cliff Swallow (*Petrochelidon pyrrhonota*) into the Piedmont of the Southeastern States

Paul W. Sykes, Jr., and Thomas L. Quay, North Carolina State University

Obvious and Concealed Declines in Local Bird Populations

Jeff Swinebroad, United States Atomic Energy Commission

Progress Report on the Breeding Bird Survey

Chandler S. Robbins, Migratory Bird Populations Station

Saturday Morning Session

Adaptive Modification of the Basal Metabolic Rate of the Black-capped Chickadee (*Parus atricapillus*)

James D. Rising, Cornell University

Sex-specific Feather Coloration in *Anas platyrhynchos*

Nancy S. Mueller and Helmut Mueller, North Carolina State University and University of North Carolina

Wintering Tree Sparrows in Central Pennsylvania

Carl W. Helms, University of Georgia

Daily Variation in Deep-body Temperatures of Sparrow Hawks as Measured by Radiotelemetry

Elden W. Martin, Bowling Green State University

The Lesson of the Hornero

Olin Sewall Pettingill, Jr., Cornell University

Saturday Afternoon Session

Symposium: An Ornithological Review

The Saturday afternoon session consisted of a series of five review papers on current areas of ornithological research. The session was chaired by Dr. Harrison B. Tordoff of the University of Michigan.

Learning and Mimicry in Avian Vocalizations

Paul C. Mundinger, The Rockefeller University

Wind Tunnel Ornithology

Vance A. Tucker, Duke University

Habitat Utilization by Spruce-woods Warblers

Douglass H. Morse, University of Maryland

Evolution of White-eyes on a Small Island

Frank B. Gill, The University of Michigan

Pigments and Proteins

Alan H. Brush, The University of Connecticut

Special Events

A film entitled "Mark Catesby, the Colonial Naturalist" was shown on Thursday evening. This film was produced by Colonial Williamsburg and was provided through the courtesy of that organization. Prints of some of Mark Catesby's paintings were on exhibit throughout the meeting in the Millington Hall Biology Reading Room as were certain other notes and sketches by Catesby. Exhibit items were provided through the courtesy of the Colonial Williamsburg Archives Department and Dr. and Mrs. George B. Green of Arlington, Virginia.

Many people in attendance at the meetings participated on Friday and Saturday in the Colonial Garden Tours of Williamsburg gardens and in trips to Carter's Grove, frequently described as the most beautiful home in North America.

Social Events

The College hosted an informal coffee hour for members and guests on Thursday evening in Phi Beta Kappa Hall.

On Friday evening the Local Committee staged a well-attended social hour in the Cascades Room of the Colonial Williamsburg Cascades Meeting Center. The pleasant outdoor setting of this center and the beautiful weather provided the ingredients for a most successful and pleasant evening.

On Saturday evening before the annual banquet the College hosted a social hour at the Statler Hilton Inn for the officers of the two societies and their wives. This informal gathering provided an ideal opportunity for the two groups to exchange ideas and to become better acquainted.

The annual banquet was held at the Statler Hilton Inn and was attended by 293 people. Dr. Kenneth C. Parkes served as toastmaster, and Dr. H. Lewis Batts, President of The Wilson Society, presented an address. The evening program concluded with a film, "The Storks of the World," filmed by Dr. Philip Kahl and presented through the courtesy of the National Geographic Society. This film showed many outstanding sequences of the comparative social behavior of this interesting group of birds. During the banquet Dr. J. J. Murray, Sr., was publicly recognized for his long and distinguished service as the Editor of *The Raven*, and a reward was presented to Mrs. Martha A. Whitson for the best paper presented at the meeting by a student or nonprofessional.

Field Trips

Local field trips were held on Friday and Saturday mornings to Jamestown Island and along the York River. Beautiful spring weather and the sighting of a good number of species contributed to the success of these trips, which were led by F. R. Scott and John H. Grey, Jr.

All-day trips were held on Sunday to Cedar Island, Craney Island, and Seashore State Park. These trips were led, respectively, by Mitchell Byrd, Charles Hacker, and G. W. Hall.

Birding was particularly good at Cedar Island with numerous species of shorebirds in migration being observed. The active heronry adjacent to Cedar Island was of particular interest to the people on this trip. The cooperation of Michael Castagna, Scientist in Charge, Eastern Shore Laboratory, Virginia Institute of Marine Science, Wachapreague, contributed much to the success of the trip.

Participants on the Craney Island trip located a number of species of migrating shorebirds including an Avocet in breeding plumage. Several species of terns were of particular interest to persons from the more inland areas.

The trip to Seashore State Park was highlighted by a stop at the Norfolk Botanical Gardens, where many azaleas and other spring flowering species

were still in good bloom. Prothonotary Warblers were common at Seashore Park as were a number of species of transient warblers.

Resolutions Committee Report

The following resolutions of appreciation were adopted by The Wilson Ornithological Society in recognition of the contribution of the College of William and Mary and the VSO to this joint annual meeting.

WHEREAS the College of William and Mary and the Virginia Society of Ornithology, as the co-hosts of the 50th annual meeting of the Wilson Ornithological Society, have graciously provided excellent facilities that were essential to a most successful meeting, have exhibited works of and the life of the renowned Mark Catesby, and have provided for enjoyable and instructive field trips;

THEREFORE BE IT RESOLVED that the Wilson Ornithological Society—its council, officers, and members—do extend a formal and warm-hearted expression of appreciation to College President Davis Y. Paschall and his staff and to the officers and members of the Virginia Society of Ornithology for their efforts on our behalf.

WHEREAS the selection of so delightful a meeting place in an inspiring natural and historical setting, and the selection of such a superior program as we have enjoyed at the meeting indicates much forethought, planning, and hard work by the officers of the Society;

THEREFORE BE IT RESOLVED that the Wilson Ornithological Society and more particularly we members and guests who have benefited from these services do, at this 50th annual meeting of the Society held at Williamsburg, Virginia, this 3rd day of May, 1969, express our gratitude to all officers of the Society, and more particularly to its President and committee members and to Harrison B. Tordoff for arranging an informative symposium on the ornithological future.

WHEREAS the success of this 50th annual meeting stems from the dedication, planning, and patience of the local committee on arrangements;

THEREFORE BE IT RESOLVED that the Wilson Ornithological Society assembled in annual meeting at Williamsburg, Virginia, this 3rd day of May, 1969, does express its grateful appreciation to Chairman Mitchell A. Byrd and all the members of his local committee on arrangements for making possible an exceptionally enjoyable meeting.

THE 1969 ANNUAL BUSINESS SESSION

ROBERT J. WATSON, SECRETARY

During the joint 1969 Virginia Society of Ornithology and Wilson Ornithological Society annual meeting in Williamsburg, the VSO held a short business meeting in John Millington Hall on the campus of the College of William and Mary on May 3 following the afternoon session of papers.

President James W. Eike called the meeting to order at 4:50 p.m. He paid tribute to Mitchell A. Byrd and others who had worked hard to arrange the meeting.

Robert J. Watson moved the adoption of a new by-law that would codify existing financial practices and establish an Endowment Fund. The motion was

carried. The new by-law was approved as Article VI, the present Articles VI-VIII being renumbered VII-IX, respectively.

Charles W. Hacker, Chairman of the Nominating Committee, submitted the following slate of nominees:

President: James W. Eike

Vice President: Mitchell A. Byrd

Secretary: Robert J. Watson

Treasurer: Mrs. Margaret Watson

Editor of The Raven: F. R. Scott

Board of Directors, Class of 1972: J. J. Murray, Jr., Mrs. Donald P. Curtis, Ben B. Warfield

Board of Directors, Class of 1970: Mrs. Myriam P. Moore (to replace Dr. Byrd)

Mr. Hacker drew attention to the fact that Dr. J. J. Murray, Sr., had asked to be relieved of the position of Editor after having served in that capacity since 1929. The Board of Directors had accepted his resignation with the utmost reluctance and had asked him to accept the position of Editor Emeritus. A standing ovation was spontaneously offered to Dr. Murray by those present as a tribute to his long and devoted service.

Motions were then approved declaring the nominations closed and instructing the Secretary to cast a unanimous vote for the above nominees.

President Eike then introduced Kevin Mullen, of the Maryland Ornithological Society (Montgomery County Chapter), who announced a new program to try to save the Red-cockaded Woodpecker and asked the VSO to cooperate. It was informally agreed that the matter would be considered by the Board of Directors and that a note about the project would be carried by *The Raven*.

The President announced that the newly established Conservation Council of Virginia was holding its first general meeting at Skyland on that day and that Paul S. Dulaney was attending as VSO representative.

Mr. Eike noted also that Donald Ambrosen, of the Back Bay National Wildlife Refuge, was retiring. A motion was passed that the Society send him a letter of appreciation for his assistance on VSO field trips.

John H. Grey pointed out that two charter members of the VSO were present in the audience: Dr. Florence Hague, who had served as Secretary from 1929 to 1954, and Dr. J. J. Murray, Sr.

The meeting adjourned at 5:20 p.m.

2636 Marcey Road, Arlington, Virginia 22207

VSO FINANCIAL STATEMENT FOR 1968

CASH BALANCE 1 JANUARY 1968		
General Fund	\$ 281.87	
Publication Fund	2,500.00	\$2,781.87
CASH RECEIPTS DURING 1968		
Membership dues and subscriptions	\$1,472.00	
Contributions	6.00	
Back issues of <i>The Raven</i>	6.75	
Patch emblems sold	45.00	
Annual meeting	50.00	
Interest on savings account	125.00	\$1,704.75
CASH DISBURSEMENTS DURING 1968		
The Raven	\$534.36	
Newsletter	240.56	
President	33.68	
Secretary	53.96	
Treasurer	123.16	
Affiliations	262.25	
Annual meeting expenses	50.00	
Incorporation fees	37.00	\$1,334.97
CASH BALANCE 31 DECEMBER 1968		
General Fund	\$ 651.65	
Publication Fund	2,500.00	\$3,151.65

Total membership, 1968: 597, including 459 active, 88 sustaining, 30 junior, 8 life, and 12 chapters.

Myriam P. Moore, Treasurer

TWO THOUSAND PHEASANTS STOCKED IN VIRGINIA

Approximately 2000 pheasants have been stocked in Virginia by the Commission of Game and Inland Fisheries this spring in a continuing effort to establish some form of this game bird in the state, reports Game Farm Manager Dennis Hart. The heaviest stocking was in Rockingham and Augusta Counties, where good habitat and in intensive predator control program have combined to create a good opportunity for establishing a new species. Other releases were made in southwest Virginia and Piedmont and Tidewater sections to bolster previous stocking efforts. The hybrid Iranian Blackneck-Chinese Ringneck is still the mainstay of the Game Commission's foreign bird introduction program.

Although usually stocked in the fall, a number of Kalij Pheasants were released in Henry County this spring to encourage nesting before the groups became widely dispersed. Followups on previous releases in Giles County showed that the birds survived Virginia's rugged mountain winters and successfully reared broods.

To help Virginia game breeders and shooting preserves obtain improved stock, the Game Commission is again making a limited number of hatching eggs of hybrid and Black-necked Pheasants available to licensed breeders at prevailing prices. Excess male birds will be made available to preserves next fall. Those who have used the Blacknecks and Blackneck-Ringneck hybrids find them more sporty although smaller than the standard Ring-necked Pheasant.

REVIEW

The Audubon Illustrated Handbook of American Birds, by Edgar M. Reilly, Jr. Foreword by Olin Sewall Pettingill, Jr. McGraw-Hill Book Company; sponsored by the National Audubon Society; xix and 524 pages; over 400 photographs, 35 of them in color, by 96 photographers; 100 drawings by Albert Earl Gilbert; voluminous index. Price, \$25.

Since this book weighs over 4½ pounds, the term "handbook" in the title is a striking example of modesty. It treats nearly 875 species, which means all the birds that have been found in North America north of Mexico, plus the Hawaiian species.

As the author indicates, it is "intended not as a field guide but rather as a useful desk reference . . . to turn to after consulting the regional field guides and before studying highly specialized sources for extremely detailed information."

Paper, printing, pictures, binding, all are of the best. The color plates, without exception, are good. We might risk mentioning particularly the Scarlet Ibis, Wood Duck, Caracara, Killdeer, Scrub Jay, Yellowthroat (with ripe Blackberries around the nest), and Painted Bunting.

The paragraphs under species titles cover appearance, size, voice, range and status, habitat, seasonal movements (if any), nesting, general biology, and suggestions for further reading about the bird. Beyond these listings, the comments, since nearly 875 species are discussed, are brief. The aim of the book is not to give technical descriptions of the birds but to "emphasize the characters that help separate a species from those it resembles most closely." For birds such as the Melodious Grassquit which have only strayed into North America, a brief paragraph suffices.

Any bird student would value this book, and experienced workers will appreciate it. It should be in every public or high-school library. It would be a fine book to put into the hands of young bird students.

J. J. Murray

NEWS AND NOTES

EARED GREBE. Another Eared Grebe was seen at Craney Island, in southern Hampton Roads, on 27 March 1969 by M. A. Byrd. This may have been the same one reported there the previous November.

COMMON EGRETS INLAND IN WINTER. While Common Egrets are regularly seen along the Virginia coast in winter, inland records at this season are unusual enough to warrant some comment. This past winter there were four different inland reports. Three were seen at Wakefield, Westmoreland County, on 1 December 1968 (F. R. Scott), 1 near Warsaw on 25 January 1969 (Scott), 3 at College Creek near Jamestown on 26 January (R. S. Kennedy & T. F. Wieboldt), and 1 just west of Yorktown on 30 January 1969 (M. A. Byrd & F. R. Scott).

EARLY CATTLE EGRETS. The first spring report of Cattle Egrets was 3 at Knotts Island, Virginia Beach, on 31 March 1969 (Mrs. L. E. Burford and Mrs. C. W. Darden).

MUTE SWAN. An immature Mute Swan was found at Dyke, Fairfax County, on 8 March 1969 by J. M. Abbott.

The Raven

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Courtesy of Walter Weber

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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 quarterly, containing articles about Virginia ornithology, as well as news of the activities of the Society and its chapters.

4. 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 \$1.00 for junior members (students), \$2.00 for active members, \$4.00 for sustaining members, \$50.00 for life members.

OFFICERS OF THE VSO

President: JAMES W. EIKE, 6207 Newman Road, Fairfax, Virginia 22030.

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NOTES ON DISMAL SWAMP BIRDS

BROOKE MEANLEY

The Dismal Swamp is the northernmost of the great southern swamps of the Atlantic Coastal Plain. Because of the moderating influence of the Gulf Stream which follows the coast northward to about southeastern Virginia before bending out to sea, many of the physical features of the Great Dismal are like those of the swamplands of the deep South. Many kinds of plants and animals, primarily associated with the lower South, are "pushed" northward along the coast by the warm littoral climate, reaching their northern limit in this region.

Despite its nearness to a great urban center, and constant lumbering and draining for nearly 200 years, the Swamp is still a vast wilderness of nearly 600,000 acres, even though most of it is second-growth forest. The nearest thing to original timber is a large but fast disappearing tract of Atlantic White Cedar or Juniper, much of which straddles the Virginia-North Carolina line. Other major plant communities are the semihydric hardwood association, composed of Swamp Black Gum, Water Oak, Red Maple, Swamp Magnolia, Sweetgum, Red Bay, Pawpaw, American Holly, and Sweet Pepperbush; the hydric hardwood-cypress or deep-water swamp association, made up of Tupelo Gum, Bald Cypress, Water Ash, Red Maple, and Swamp Poplar; hammock forest, the driest type in the Swamp, in which White Oak, Cherrybark Oak, Cow Oak, Beech, and Sourwood are important; and the evergreen shrub bog community, composed mainly of several species of ericaceous shrubs. Compared to the Okefenokee Swamp of southeastern Georgia, the Dismal is more of a solid forest, while Okefenokee is a complex of forests, lakes, and grassy prairies.

I began making observations of birds of the Dismal Swamp in the fall of 1957. My earliest work was concerned with the large winter blackbird roost in the Swamp that contained an estimated 25 million birds. During the last four nesting seasons (1966-1969) I spent a total of 40 days in the Swamp, mostly studying the Swainson's Warbler. During that time there were opportunities to make observations on other birds. Virtually all observations were made in the northwestern section, in the vicinity of the upper end of Jericho Ditch, Nansemond County.

I wish to acknowledge the cooperation of Mr. E. A. Friend, Supervising Forester, Nansemond District, Union Bay-Camp Corporation.

American Woodcock, *Philohela minor*

The Woodcock is a common winter resident in the Swamp and surrounding suitable habitat. On the evening of 12 January 1960 I heard 50 birds *peenting* (uttering their courtship call) on the western side of the Swamp between Suffolk and the North Carolina state line.

Chuck-will's-widow, *Caprimulgus carolinensis*

Whip-poor-will, *Caprimulgus vociferus*

Both species occur in the Dismal Swamp region but more along the edge of the Swamp than in it. They prefer the higher ground. Several night-time surveys on the western side of the Swamp between Suffolk and Cypress Chapel revealed the Whip-poor-will to be the more abundant. On the night of 23 May 1969 I heard 9 Whip-poor-wills and 3 Chuck-will's-widows.

White-breasted Nuthatch, *Sitta carolinensis*

This species is listed by Murray (1952) as uncommon on the coast (and presumably including the Swamp area). I found it to be a common breeding bird in the Swamp in 1969. I observed 6 along a half-mile transect on 12 June 1969. A bird was observed carrying nesting material on 11 April 1969.

Swainson's Warbler, *Limnothlypis swainsonii*

Locally common in the Swamp, this bird is near the northern limit of its breeding range here. A few occur in the Pocomoke Swamp near Ocean City, Maryland. Eight were observed along a ½-mile transect at the western end of Corapeake Ditch, 20 April 1958 and 6 along a ½-mile transect at the North Jericho Ditch, 1 May 1968.

Earliest arrivals reach the Dismal by 15 April, and the earliest date of pairing was 21 April 1969. The earliest date of nest building was 23 April 1969. Nest building was also noted on 1 May 1968 and 1 May 1969. Departure dates in fall are unknown.

I have found 11 nests in the Swamp. The earliest one with eggs was on 1 May 1969; the latests with eggs, 29 June 1967; and the latest nest with young was 7 July 1967. One nest of 4 eggs was found on 10 May 1969 (F. C. Burford, personal communication). Nests of 3 eggs were noted on 16 June 1966 and 13 June 1968; nests of 2 eggs on 29 June 1967 and 11 June 1969. June dates are apparently renesting attempts.

Blue-winged Warbler, *Vermivora pinus*

Murray (1962) lists this species as being a rare transient in Virginia. F. R. Scott (personal communication) suggested that its status near the coast was not well known. I found the species to be a common spring migrant in the swamp during four years of observations, 1966-1969. In a 100-acre tract on 28 April 1968, I counted 30. It is one of the earliest of the spring transients to arrive, and several were observed on 20 April 1969. By the end of the first week in May, most of them have passed through. The latest record for the Swamp that I know of is one seen by Floy C. Burford on May 10.

Parula Warbler, *Parula americana*

This is another species that is conspicuous by its absence in most of the Swamp during the breeding season. In the North Jericho Ditch section of the Swamp where most of my observations were made, I have not seen one in the past five breeding seasons. Where it does occur in the Swamp during the breeding season and migration, it seems to be associated with stands of cypress, which no longer form an important part of the Swamp forest.

Wayne's Warbler, *Dendroica virens waynei*

This coastal race of the Black-throated Green Warbler is a common breeding bird in the Swamp. This is the northern limit of its breeding range. I saw 10 territorial males along a 1-mile transect along Jericho Ditch in April and also in May 1969. Paul W. Sykes (in Scott and Cutler, 1966) recorded 23 on the east side of the Swamp on 1 June 1966.

It is one of the first of the resident warblers to arrive on the breeding grounds and probably the earliest to begin nesting in the Swamp. W. F. Rountrey (letter to J. J. Murray, 31 May 1953) found a nest on the east side of the Swamp on 4 April 1953. I observed a female building a nest in the Swamp on 12 April 1969. It was gathering the "wool" coating that covers the stems of young ("fiddleheads") Cinnamon Ferns.

There are few published records of this species in the Swamp after early June. Sykes (personal communication) and Rountrey (field notes from Tidewater Virginia, 17 May 1954 to 8 August 1954) seem to think that this species departs from the breeding grounds soon after the nesting season. I found the birds fairly common in the Swamp through the month of June. I saw 8 territorial males along a 1-mile transect on 12 June 1969 where 10 had been seen on April and May. I saw 2 birds in this same transect on 21 June 1969.

Since I usually discontinue my work in the Swamp after early July, I do not know their status in July and August. Like most other birds, they sing much

less in summer, and since they are generally high ranging, their presence would likely go unnoticed.

Prairie Warbler, *Dendroica discolor*

From 1966 to 1969 I was surprised to find a few individuals of this species breeding in heavy swamp forest along the north end of Jericho Ditch, with such avian associates as Swainson's and Hooded Warblers and Ovenbirds.

Kentucky Warbler, *Oporornis formosus*

In 4 years I have seen only 1 Kentucky Warbler in the Swamp during the breeding season. The bird was observed on the morning of 23 May 1969. Since I did not see or hear it on subsequent visits, I suspect that it was a late migrant or a "lost" bird. Murray (1952) presents no breeding records for this section of Virginia.

Florida Grackle, *Quiscalus quiscula quiscula*

This southern form of the Common Grackle reaches its northern limit in southeastern Virginia (American Ornithologists' Union, 1957), where some intergradation may occur with the Purple Grackle (*Q. q. stonei*) (see Chapman, 1935). Three specimens that I collected at a nesting colony along the edge of the Swamp near Suffolk on 22 April 1969 appeared to be typical of the Florida race.

The Purple Grackle and Bronzed Grackle (*Q. q. versicolor*) races apparently are the common winter residents of the Dismal Swamp region. The status of the Florida race as a winter resident in this area is unknown. John S. Webb collected a male of the Florida race on the Maryland Eastern Shore at Whiton, 16 February 1963.

Brown-headed Cowbird, *Molothrus ater*

This species is an uncommon breeding bird in the Swamp. I usually see only 2 or 3 a day during April and May and fewer in June. None of the 11 Swainson's Warbler nests that I found were parasitized by the cowbird. The Swainson's Warbler is an important host species in other areas. Apparently the Dismal Swamp is near the northern limit of the southeastern breeding-range hiatus of the Brown-headed Cowbird.

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Patuxent Wildlife Research Center,
Laurel, Maryland 20810

FALL BANDING RESULTS AT KIPTOPEKE BEACH DURING 1968

F. R. SCOTT

During the fall of 1968 a banding station was run at Kiptopeke Beach, on Virginia's Eastern Shore, for the purpose of trapping and banding small transient land birds. This was the sixth year this station has been run, and as in past years there was considerable cooperation with *Operation Recovery*, a cooperative banding program coordinated by the U. S. Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife.

As in 1967, the station was run for just over 7 weeks, from September 7 to October 27. Licensed banders in charge of the station operation were Mitchell A. Byrd, Charles W. Hacker, H. Brad Hawkins, Mr. and Mrs. Sydney Mitchell, F. R. Scott, and Walter P. Smith. The banders are indebted to C. M. Cabbage, President of J. Howard Smith, Inc., for permission to make use of company land for the station, and to Arthur Addison, of Tourinns Motor Lodge, Kiptopeke, for many courtesies during the station operation. W. P. Smith laboriously edited the field records and prepared a final tabulation.

The results in 1968 were the best yet for this station, as detailed in Table 1. The improvements in the operation and results of this station over the years is clearly evident from this table. In comparison with 1967, the 1968 results showed a marked improvement in trapping efficiency, the number of birds trapped per 1000 net-hours. This was undoubtedly the result of several factors. The station banders have continued to improve net placements as their experience has grown over the years. The weather was also a great help during 1968, with few disruptive periods of hard rain and many moderate frontal systems that kept the birds moving almost continuously.

Table 1. Comparative results of 6 years of banding at Kiptopeke Beach, Virginia.

	1963	1964	1965	1966	1967	1968
New birds trapped	216	1660	3284	5251	8590	12,336
Total species	41	61	72	95	95	100
Total net-hours	1722	2363	9476	11,347	17,725	18,634
Trapping efficiency, new birds/1000 net-hrs	125	702	347	463	484	662
Days of operation	7	16	32	37	50	51

Techniques were generally consistent with previous years, and a maximum of 38 mist nets were usually kept open during the daylight hours until late afternoon except in periods of heavy rain. Where possible, birds were aged by the skulling technique; i.e., determining the degree of ossification of the skull in strong light under magnification. With most small birds, this is a simple process that does not harm the bird in any way. For the *Operation Recovery* program, most birds were weighed and their wing chords measured.

The most common birds banded during this operation were Myrtle Warbler, 3325 trapped; Yellowthroat, 1116; American Redstart, 979; Swainson's Thrush, 794; Gray-cheeked Thrush, 650; and Veery, 519. The best flights occurred on September 13-14 and 27-30 and October 5, 9, 14, 20, 22, and 26, with a peak of 952 birds banded on October 20. The flight on the 20th was unusually interesting since it was principally a warbler flight. On this date one might reasonably expect a flight to contain a high proportion of juncos and sparrows. The Myrtle Warbler was the most common, with 743 caught, but there were also 15 other

warbler species, including 10 Parulas, 42 Black-throated Blues, 6 Blackburnians, 1 Chestnut-sided, 27 Blackpolls, 3 Northern Waterthrushes, and 10 Connecticut Warblers.

A few birds trapped would be considered rare or at least very unusual for the area. These included a Western Kingbird on September 10 (Byrd), Bewick's Wrens on October 6 (Mitchells) and 26 (Smith), Warbling Vireos on September 16 (Smith) and 28 (Scott), a Golden-winged Warbler on September 13 (Byrd), and a Clay-colored Sparrow on October 16 (Hawkins). Most of these were examined in the hand by numerous observers and photographed in color. There were three foreign retraps, i.e., birds banded elsewhere and retrapped at this station. These are listed in Table 2. In this table, *HY* indicates the bird was originally banded as a "hatching year" bird, i.e., a bird of the year (less than 1 year old); *M* indicates a male; and *U* means the sex was unknown. The Veery recovery on October 27 is probably the latest fall date for this species in Virginia.

Table 2. Foreign recoveries at Kiptopeke Beach in 1968.

#70-139359	Catbird	HY U	
Banded:	08-15-67	Linwood, N. J.	Mr. & Mrs. W. E. Savell
Recovered:	10-05-68	Kiptopeke Beach, Va.	Sydney Mitchell
#107-025386	Veery	HY U	
Banded:	10-06-68	Cape May, N. J.	Mrs. E. P. Teulings
Recovered:	10-27-68	Kiptopeke Beach, Va.	W. P. Smith
#74-55932	Myrtle Warbler	HY M	
Banded:	10-15-68	Chestertown, Md.	Mrs. D. A. Mendinhal
Recovered:	10-20-68	Kiptopeke Beach, Va.	H. B. Hawkins

There were some interesting changes in species abundance from the previous year. Since the 1967 and 1968 operations were roughly comparable in dates of station operation and total net-hours, a comparison of some of the seasonal totals for selected species is shown in Table 3. It is probably inaccurate to try to use these figures to show changes in species populations as a whole, at least for the migratory species. Migratory flights can be displaced eastward or westward by weather conditions and thereby miss the banding station entirely, or any given flight may pass over the area entirely, not coming down until it is south of Chesapeake Bay. Thus it is probably normal to expect large year-to-year changes in many species totals. The radical change in a nonmigratory species like the Tufted Titmouse, however, is quite curious. The 1967 results were reported in detail by M. A. Byrd and W. P. Smith (*Raven*, 39: 60-69, 1968).

Table 3. Comparative banding totals of selected species at Kiptopeke Beach in 1967 and 1968.

<i>Species</i>	<i>1967</i>	<i>1968</i>
Sharp-shinned Hawk	35	18
Blue Jay	21	133
Tufted Titmouse	0	21
Red-breasted Nuthatch	1	34
Swainson's Thrush	397	794
Gray-cheeked Thrush	324	650
Veery	271	519
Red-eyed Vireo	187	409
Philadelphia Vireo	10	35
Tennessee Warbler	15	29
Parula Warbler	44	118
Magnolia Warbler	132	260
Blackburnian Warbler	5	15

Some of the daily banding totals indicate just how abundant some species can be in this area during the fall migration. It is important to remember here that only a small fraction of the birds passing through the banding area are actually trapped. Some pass overhead and rarely if ever get caught, such as the Bobolinks and other blackbirds. Even of those species that do get trapped regularly, probably 95 to 99% pass through without getting caught. With this in mind, some of these totals take on new meaning. If we assume that only 1 in 50 Myrtle Warblers passing through the station get caught, the total of 743 banded on October 20 would indicate that some 37,000 Myrtle Warblers passed through that day! For those of us that were there, this figure does not seem excessive.

Other interesting banding totals include 125 Catbirds on October 5, 108 Veeries on September 14, 88 Swainson's Thrushes on September 29, and 147 Gray-cheeked Thrushes on October 9. The peak count of Red-eyed Vireos was 107 on September 14, whereas 5 Philadelphia Vireos were banded on September 27. In the warblers, 15 Tennessees were trapped on October 5, over half of the entire fall total! Magnolia Warblers peaked at 54 on September 13 and Black-throated Blues at 48 on October 5. Also outstanding were 12 Black-throated Green and 10 Bay-breasted Warblers on October 5, 47 Ovenbirds on September 14, and 127 Yellowthroats on September 29.

As data from this banding station accumulate over the years, the "funneling" effect that the configuration of the Eastern Shore land mass has on small migrating land birds in the fall becomes more evident. The effects of major weather changes on bird movements are also becoming better known, although predicting major bird flights can still be a very uncertain activity. It is hoped that the operation of this station can be continued in the future with even more significant results.

115 Kennondale Lane, Richmond, Virginia 23226

IN MEMORIAM: WILLIAM OWEN LEWIS

On June 4, 1969, William Owen Lewis, 42, died of cancer at Charlottesville. He was president of the Michie Company, one of the largest law publishing firms in the country, which also printed *The Raven*.

A resident of Ivy who lived most of his life in Albemarle County, he was graduated from the College and then the Law School of the University of Virginia in 1951.

Lewis served on the VSO executive committee and was a member of a number of national ornithological organizations including the American Ornithologists' Union, the Wilson Ornithological Society, and the Cooper Ornithological Society.

An indomitable participant in the "big count" he, along with his wife "Boo" and mother-in-law Katherine Michie, took part for a number of years in the Cocoa, Florida, Christmas bird count. Sometimes producing over 200 species, this count has most often been the national champion during the last several decades.

On a remarkable day, May 4, 1950, Bill, Kenneth Lawless, and I, all students at the University at the time, went afield from 4:30 a.m. to 6:30 p.m. and listed 138 species of birds within Albemarle County, which is still a record for the Charlottesville area. We were aided by a weather system which caused rainfall for the two preceding days and brought in a variety of water birds to our few ponds (in those days). Also helpful was the occurrence of such scarce items as the Least Bittern, Virginia Rail, and the Bachman's Sparrow. Bill, like many of us, seemed to particularly enjoy the competitive aspect of the achievement of a good list.

He was very interested in politics and was chairman of the Albemarle County Democratic Committee from 1964 until his death. As a delegate he had attended the past two national Democratic conventions.

Besides his wife, Katherine Michie Lewis, he is survived by a daughter, Katherine Hewson Lewis.

C. E. Stevens

EARLY SPRING DATE OF THE GREAT
CRESTED FLYCATCHER

M. RALPH BROWNING

During a field investigation on 22 March 1969 about 6 miles southeast of Leesburg, Virginia, I discovered a Great Crested Flycatcher (*Myiarchus crinitus*). The bird was observed with 7x35 binoculars as close as approximately 7 meters. Two Eastern Phoebes (*Sayornis phoebe*) were also observed in the immediate area, about 90 meters south of the Potomac River, where the three fed on flying insects.

The earliest date in *A Check-list of the Birds of Virginia* (J. J. Murray, 1952, p. 69) is 22 April (average, from Cape Henry). R. E. Stewart and C. S. Robins (*Birds of Maryland and the District of Columbia*, 1958, p. 200) give 18 April 1931 and 19 April 1914 for extreme arrival dates from the District of Columbia. An earlier record was made at Derby Hill, near Mexico, New York, on 15 April (*Audubon Field Notes*, 21: 490, 1967).

4121 North Fourth Street, Apt. 4, Arlington, Virginia

WESTERN TANAGER AT NEWPORT NEWS

DOROTHY L. MITCHELL

On 1 May 1969 about 9:30 a.m. I walked to the power line behind my woods in Newport News to look for new spring migrants. I heard a Summer Tanager singing and a Scarlet Tanager, among others, and also something new, sort of a Robin-Blue Grosbeak combination I thought.

Finally I located it on a dead limb about 40 feet up, acting like a flycatcher, flying up, swooping down, and then back up to the perch. It was a male Western Tanager, *Piranga ludoviciana*. Before he flew away, I watched him for 8 to 10 minutes as he would sing some more and then feed again. That beautiful red head, yellow body, and black back with wing bars was a real thrill to begin May with.

This appears to be the sixth record of this bird for Virginia (see *Raven*, 39: 38, 1968).

596 Harpersville Road, Newport News, Virginia 23601

THE SECOND VSO NORTHERN NECK FORAY

ROBERT J. WATSON

Good fellowship and a sense of accomplishment were the rewards reaped by approximately 20 persons who participated in the fourth VSO breeding-bird foray between 11 and 15 June 1969. The usual hazards of early rising and a cold breakfast were surmounted with cheerful enthusiasm.

As in 1968, the locale of the foray was the Northern Neck, which had proved too large to be adequately covered in a single year. The Washington and Lee Motel in Montross again served as headquarters. Field parties operated mostly eastward from this point, in Westmoreland, Northumberland, Richmond, and Lancaster counties. Part of King George County was also included.

As director of the foray, the writer found his task considerably simplified by the fact that the campaign plan devised for 1968 could be followed with little or no change. The intensity of coverage was about the same as in the preceding year, with from three to five parties in the field each day. As usual, an effort was made to include the widest possible variety of habitat. Thanks to the availability of several canoes, some extensive marshy areas which could not be visited in 1968 were included in this year's coverage.

The 1968 foray in this area was held in late May. Although this was probably the height of the nesting season, there were still many transients in the area, and this fact created some confusion in determining which birds were breeding and which were still migrating. The mid June dates picked this year virtually eliminated this problem.

The total of 119 species found was considerably less than the 165 reported in 1968 since there were few transients this year. Nevertheless, this was the best total yet for a June breeding-bird foray and was augmented by many apparently nonbreeding waterbirds. Details on many of the birds seen will be published in a separate paper, but some of the highlights might be mentioned here. Another Bank Swallow colony was found along the Potomac River at Muse's Beach, Westmoreland County, and in a canoe trip through some marshes along the Rappahannock River and Cat Creek near Warsaw on 14 June R. T. Bullard and the writer recorded 137 Long-billed Marsh Wrens. Tree Swallows were reported by several parties, and a party led by Mrs. Sydney Mitchell found 3 Bobolinks and a Baltimore Oriole at Wakefield on 12 June, both far from their normal breeding grounds.

2636 Marcey Road, Arlington, Virginia 22207

VSO FIELD TRIP TO SKYLAND—1969

W. P. SMITH

To most of us "flatlanders" the trip to Skyland always provides pleasant relief from the hot, humid atmosphere of the city, and this years trip was no exception.

We began arriving late Friday afternoon, 20 June 1969, and proceeded to the new trip headquarters, Fell Cottage, for the predinner festivities. There were many nostalgic comments concerning old Hepburn Cottage, but the new headquarters provided the same beautiful Veery calls, and through its picture window we saw the usual Chestnut-sided Warblers, a Black-billed Cuckoo and, as dusk approached, the same panorama of lights flicking on in Luray in the valley below. We counted a surprisingly small 16 heads as we trooped off for dinner, but all present agreed it was a very select group.

Saturday morning we gathered in the fog at the Dining Room parking lot, listened to the Least Flycatchers calling, and then started off for Lewis Falls. Arriving at the top of the Falls, we paused to drink in the scenery (and also to rest some of those lesser used muscles). Someone discovered the nest of a Phoebe on the cliff to the left of the Falls, and then another was discovered to the right of the Falls. We thought it strange that this reputedly territorial species would establish two active nests within 30 feet of each other! The trail back up from the Falls produced good looks at Scarlet Tanagers and a beautiful male Balckburnian Warbler, as well as a nest of young Crested Flycatchers in a cavity in the top of a stump about 6 feet above the trail.

After lunch in a secluded picnic area, we proceeded to Big Meadows, where we flushed many Vesper Sparrows and a few deer, and Doris Smith picked so many wild strawberries her fingers are still stained.

We returned to Skyland about 3:30 p.m., where most of us showered and napped, but a more hardy group insisted on climbing the Stonyman trail. They reported two Broad-winged Hawks, but very little other birdlife. They also reported that tripmaster Hacker became so sleepy (exhausted?) that Sallie Nelson had to help him back down the trail.

Saturday night after dinner Charlie Hacker showed a series of slides that he had taken on previous VSO field trips. They were well received, producing many chuckles and even a few groans.

Sunday morning, in cool, cloudy weather, we started up the easy loop trail to Hawksbill. Singing Canada Warblers and Winter Wrens greeted us, and a most unusual Junco's nest was discovered in a shrub 4 feet off the ground containing 7 eggs! There was, of course, some speculation concerning Cowbird contributions, but all eggs were of the same size and coloration. Arriving at the top of Hawksbill, we were regaled with soul music by some long-haired young guitarists, and watched with interest while another group of young men (short-haired, this time!) rappelled down the rocky face of Hawksbill.

We took the steep, short trail down, and at about 11:00 a.m. the group dispersed homewards with pleasant memories of a wonderful weekend.

3009 Chesapeake Avenue, Hampton, Virginia 23361

NEWS OF THE LOCAL CHAPTERS

Richmond Natural History Society

Twenty-five members of the Richmond Natural History Society beat a hasty retreat from the city to the Outer Banks of North Carolina, 14-16 February 1969 to see what they could see.

They saw thousands of birds—at Pea Island National Wildlife Refuge and Cape Hatteras—in extreme overcast and below-freezing weather, with the wind cutting through layer after layer and amazing the urban skin with its ice-age edge. But the lack of sunlight seemed to let the colors and markings of the birds snap out from the subdued and wintry low-key pond and seascape, greatly aiding identification. Among the birds seen were Blue and Snow Geese and hybrids between the two, Canada Geese, a Snowy Egret, Common Gallinules, Black Skimmers, American Avocets, a Hudsonian Godwit, and Boat-tailed Grackles, as well as many of the wintering ducks. Edward A. Marks, Jr., Tripmaster, set a needed brisk, cold-weather pace for the 5-mile walk.

On 24 May 1969 David K. Roszell was elected President of the Richmond Natural History Society for 1969-70 at the Society's annual meeting at West-view-on-the-James, Goochland County. Other officers elected were Robert A. Knight, Vice President; Mrs. David K. Roszell, Recording Secretary; Mrs. Elihu S. Estes, Corresponding Secretary; and Miss Virginia P. Lacy, Treasurer. Most noteworthy birds seen on the walk that day were a male and female Blue Grosbeak building a nest near the C. & O. tracks.—Helena H. Dean.

PRESERVATION OF SCENIC RIVERS URGED

A six-man study team headed by Paul S. Dulaney of the University of Virginia and former president of the Virginia Society of Ornithology has recommended the enactment of legislation establishing 26 rivers and streams into a Virginia Scenic and Recreational Rivers System, according to news reports released on 24 June 1969. The report, prepared by the Division of Planning, School of Architecture, University of Virginia, was submitted to the Virginia Commission of Outdoor Recreation.

The study team made an inventory of all possible scenic rivers totaling 72 streams in nine major river systems between 1 June 1968 and 15 May 1969. Six quality factors were used in evaluating each stream: canoeing, fishing, notable natural features, notable historical and archeological features, water quality, and natural conditions of the banks and adjoining lands.

The team urged priority consideration of three streams that have statewide or national importance. These are the Shenandoah River, the Rappahannock-Rapidan system, and Dragon Run, the upper part of the Piankitank River on the Middle Peninsula.

According to Elbert Cox, director of the Commission of Outdoor Recreation, the study will be reviewed, and a report with recommendations will be made to the governor and the Virginia General Assembly in November.

ENDANGERED WILDLIFE CHOSEN AS WILDLIFE ESSAY THEME

"What Endangers Wildlife in Virginia" has been chosen as the topic for the Twenty-third Annual Wildlife Essay Contest, reports Game Commission Information Officer Francis N. Satterlee. The annual event, open to Virginia school children in grades 5 through 12, is sponsored jointly by the Virginia Commission of Game and Inland Fisheries and the Virginia Division of the Izaak Walton League of America. Some \$3000 in prize money will again be available including a \$1000 scholarship to be awarded for the best entry by a high-school senior.

Schools will receive official notice of the contest and entry forms by early September. Local schools must be officially entered before essays from individual students can be accepted. Packets of reference materials and contest information are supplied free to participating schools. Students will be competing for prizes ranging from \$5 honorable mentions to \$50 for the best in each grade.

RUFFED GROUSE INCREASE IN EASTERN VIRGINIA

Ruffed Grouse are continuing to increase locally in Virginia east of the Blue Ridge, according to C. H. Shaffer, game management field coordinator of the Commission of Game and Inland Fisheries. Mr. Shaffer published his report in the July 1969 issue of *Virginia Wildlife*.

Two areas seem particularly attractive to these birds, the Quantico Marine Corps Base in eastern Prince William County and the Buckingham-Appomattox-Nelson County area near the James River. Since the wildlife personnel at Quantico keep accurate records on game killed by hunters, these records serve as an ideal index of the increase of the Ruffed Grouse there. The grouse harvest there has increased steadily from 5 birds in the 1962-63 hunting season to 154 in the 1968-69 season.

NEWS AND NOTES

REFUGE MANAGERS CHANGE POSITIONS. John C. Fields, manager of Presquile National Wildlife Refuge, near Hopewell, Virginia, was transferred to Pungo National Wildlife Refuge, Plymouth, North Carolina, on 11 June 1969. He was replaced by Paul D. Daly, who moved to Presquile from the position of assistant manager at Back Bay National Wildlife Refuge. Back Bay also has a new manager, Robert Gilmore, who took over that position on 15 May 1969, replacing Donald Ambrosen, who retired.

NEW GAME COMMISSION CHAIRMAN. Ralph G. Gunter of Abingdon, Commissioner of Game and Inland Fisheries from Virginia's Ninth Congressional District, was elected chairman of that body at their recent meeting in Richmond. Gunter was appointed to the Commission in 1962 and served as vice chairman last year. Dr. Custis L. Coleman of Richmond was elected vice chairman for 1969-70. A. Ree Ellis of Waynesboro is the immediate past chairman.

GREAT CORMORANT. A Great Cormorant in full breeding plumage was seen on one of the artificial islands along the Chesapeake Bay Bridge-Tunnel on 7 April 1969 by Mrs. D. P. Curtis and party. Apparently the same bird was found here again on 12 April by Mitchell A. Byrd.

GLOSSY IBIS INLAND. J. M. Abbott noted 4 Glossy Ibis flying southward over his home in eastern Fairfax County, Virginia, on 17 April 1969. There are very few records of this species so far inland from the coast.

MALLARD BREEDING. A Mallard with 8 small young was found at Bull Run, Fairfax County, on 17 May 1969 by Gale Monson.

BLACK DUCK NESTS. Two Black Duck nests were reported during the spring, one with 9 eggs at Grandview, Hampton, on 10 April 1969 (M. A. Byrd and his ornithology class) and another with 6 eggs on Metomkin Island, Accomack County, on 24 May 1969 (M. A. Byrd).

EUROPEAN WIDGEON IN HAMPTON ROADS. G. W. Hall found a male European Widgeon at Hampton on 23 February 1969, and between then and 16 March up to 2 males were seen there by many observers, including M. A. Byrd, Mrs. Ruth Beck, and W. P. Smith. Another male was observed at Craney Island on 25 February 1969 (M. A. Byrd *et al.*).

HARLEQUIN DUCKS. An adult male Harlequin Duck was seen along the Chesapeake Bay Bridge-Tunnel on 30 March 1969 (P. A. & F. G. Buckley and P. D. Daly) and later in the same place on 2 and 12 April (M. A. Byrd). Apparently a different male was found at Willoughby Spit, Norfolk, on 10 April 1969 by Mrs. D. P. Curtis and others. This last bird was seen later by a number of observers, including M. A. Byrd on 13 April.

KING EIDERS AT HAMPTON. The only King Eiders reported during the winter were 2 females at Grandview, Hampton, on 4 March 1969 (M. A. Byrd *et al.*).

TURKEY VULTURES CROSSING CHESAPEAKE BAY. One of the few evidences of Turkey Vultures crossing Chesapeake Bay was obtained on 27 December 1968 when F. R. Scott counted 39 moving southward low over the Chesapeake Bay Bridge-Tunnel. At the time of the observation the flock was about midway across the mouth of the Bay and was just approaching the northernmost of the artificial islands.

COMMON GALLINULE NEST. A Common Gallinule nest with 10 eggs was found near Saluda, Middlesex County, on 17 May 1969 by M. A. Byrd. Most of the eggs had hatched by 25 May.

WILSON'S PLOVER AWAY FROM COAST. M. A. Byrd, Robert Kennedy, and Tom Wieboldt saw a Wilson's Plover at Grandview, Hampton, on 10 May 1969. This is an unusual record for the western shore of Chesapeake Bay.

GODWITS AGAIN IN SPRING. On 1 June 1969 P. A. and F. G. Buckley and Mrs. D. P. Curtis found 6 Marbled Godwits, apparently 3 pairs, in the Smith Island area of Northampton County. The birds were calling loudly.

RUFFS AT BACK BAY. Paul D. Daly reported finding 2 Ruffs at Back Bay National Wildlife Refuge on 25 April 1969. This species was previously reported here in 1967 and 1968 (*Raven*, 39: 32, 1968).

AVOCETS AND STILTS. Two American Avocets were seen at Craney Island Disposal Area, Hampton Roads, on 4 May (J. E. Ames, F. R. Scott, *et al.*) and again on 18 May 1969 (Ames). Romie Waterfield reported 2 Black-necked Stilts at Back Bay Refuge on 25 April 1969, and at Chincoteague National Wildlife Refuge 2 birds were seen first on 4 May 1969 (C. O. Handley, Jr.) and remained at least till 29 May (*vide* E. F. Folsom). Perhaps the same 2 were seen here again on 15 June and 13 July 1969 (Handley), suggesting the possibility of breeding.

NORTHERN PHALAROPES. Northern Phalaropes were reported twice during the spring, 1 at Norfolk on 17 April 1969 (Mrs. F. C. Burford and

Miss E. H. Scott) and 6 at Craney Island on 29 May 1969 (P. A. and F. G. Buckley and R. L. Anderson).

WHITE-WINGED GULLS ON THE COAST. There were three reports of white-winged gulls during the winter in Virginia. Single Glaucous Gulls were reported at Craney Island on 25 February 1969 (M. A. Byrd, R. S. Kennedy, & T. F. Wieboldt) and Cape Henry on 29 March 1969 (P. A. & F. G. Buckley), and an Iceland Gull was found at Fisherman Island on 28 March 1969 (P. A. & F. G. Buckley).

ANOTHER LESSER BLACK-BACKED GULL. A Lesser Black-backed Gull was observed carefully on Fisherman Island, Northampton County, on 2 and 5 April 1969 (P. A. and F. G. Buckley, P. D. Daly, and L. Dunkesson). This appears to be the seventh record for the state (*cf. Raven*, 39: 34, 1968).

BONAPARTE'S GULLS ON POTOMAC. On 5 April 1969 J. M. Abbott counted 150 Bonaparte's Gulls moving northward up the Potomac River in Fairfax County. This is an excellent number for this inland locality.

BLACK-HEADED GULL. The only European gull of the winter was a Black-headed Gull seen along the Chesapeake Bay Bridge-Tunnel on 30 March 1969 by P. A. and F. G. Buckley.

TERNS NEAR THE COAST. A breeding colony of Gull-billed Terns in the Smith Island area on 1 June 1969 was estimated to contain a minimum of 200 nests (P. A. and F. G. Buckley and Mrs. D. P. Curtis). Ten Roseate Terns were seen on Fisherman Island on 25 and 27 May 1969 but not later (P. A. & F. G. Buckley), and 2 were found in the Smith Island area on 1 June 1969 (P. A. Buckley *et al.*). A Least Tern colony of 150 nests was located at Craney Island on 29 May 1969 (P. A. & F. G. Buckley and R. L. Anderson). Surprisingly at this early date, some of the young had already fledged.

RAZORBILL AT CHINCOTEAGUE. E. F. Folsom caught a Razorbill on the beach at Chincoteague National Wildlife Refuge on 25 January 1969 and photographed it before releasing it.

NESTING GREAT HORNED OWLS. Three active Great Horned Owl nests were reported in Virginia in early 1969. Gale Monson saw an adult on a nest at Annandale, Fairfax County, on 22 February; G. W. Hall found a pair at an old Bald Eagle nest at Jamestown on 23 and 26 March; and a nest with 2 young was discovered at the Newport News City Park in York County on 24 March by Mrs. Sydney Mitchell and Mrs. Norman Silsby.

RED-COCKADED WOODPECKERS. Many observers reported on two different Red-cockaded Woodpecker stations in Sussex County, near Wakefield. The best observation was of 7 birds in view at once on 27 April 1969 (E. O. Johnson *et al.*).

EARLY BARN SWALLOW NESTING. Gilbert Grant found a Barn Swallow feeding 3 young in the nest at Clarksville, Virginia, on 11 May 1969. This seems a rather early date for this.

HIGH RAVEN COUNT. Mr. & Mrs. R. P. Teele reported a count of 34 Common Ravens in Shenandoah National Park on 10 May 1969. This is unusually high although not a record count.

INLAND CONCENTRATION OF FISH CROWS. A count of 80 Fish Crows at Mount Vernon, Fairfax County, on 3 January 1969 was unusually good for midwinter (J. M. Abbott).

ORANGE-CROWNED WARBLERS. In addition to those Orange-crowned Warblers reported in the Christmas bird counts, there were several other

winter reports from Virginia. One wintered at the feeding station of Mrs. Frank E. Miller in Norfolk (*vide* Mrs. F. C. Burford), 1 was seen at Waverly, Sussex County, on 1 February 1969 (C. C. Steirly), and another was found at Back Bay National Wildlife Refuge on 23 March 1969 (Dr. & Mrs. M. A. Byrd).

EARLY WATERTHRUSH NEST. H. Brad Hawkins discovered a Louisiana Waterthrush nest with 2 eggs and 2 young on 3 May 1969. The nest, which was along the Rapidan River of Madison County in Shenandoah National Park (altitude, about 1750 feet), was about 10 inches off the ground in a "pocket" on the vertical side of a large boulder.

YELLOW-HEADED BLACKBIRDS IN NORFOLK AREA. Three apparently different Yellow-headed Blackbirds were seen in the Norfolk area during the past fall and winter. An immature male appeared in Algonquin Park, Norfolk, on 30 October 1968 and remained for more than a week. It was seen by Mrs. C. W. Darden, Mrs. Frank E. Miller, and others, and it came to Mrs. Miller's feeding station on several occasions. A fully adult male was found in Virginia Beach along the toll road on 19 November 1968 by Mrs. L. E. Burford. An adult female, first seen near Little Creek, Virginia Beach, on the Christmas count on 27 December 1968, remained in the area at least until 18 January 1969 (Mrs. F. C. Burford & Gisela Grimm).

WINTER ORIOLE IN WAYNESBORO. Although wintering Baltimore Orioles are now regularly reported in many parts of Virginia's Coastal Plain, there are still relatively few such reports from west of the Blue Ridge. Of interest, therefore, was a male found at Waynesboro on 3-4 January 1969 by Mrs. Mark D. Snyder and family.

BOAT-TAILED GRACKLE INLAND. A Boat-tailed Grackle was seen at Crancy Island on 4 May 1969 by many observers on a VSO field trip led by C. W. Hacker. This appears to be the first record of this coastal species for the lower James River, although there are previous reports for the lower York and Potomac Rivers.

PINE GROSBEEKS IN AMHERST COUNTY. According to Ruskin S. Freer a flock of 30 Pine Grosbeaks was seen in Amherst County on 17 January 1969 by W. S. Hooks.

HOUSE FINCHES STILL ON INCREASE. The House Finch is apparently continuing its increase in Virginia as a winter visitor. In addition to the three Christmas bird counts it was reported on, there were also numerous other reports, especially from the Washington, D. C., area. A few were reported in Hampton during the winter (W. P. Smith), and at Alexandria they were present from 2 January to 2 March 1969 (J. M. Abbott). At Richmond, up to 4 different birds were seen from 15 December 1968 to 22 March 1969 (Mr. & Mrs. D. K. Roszell).

LINCOLN'S SPARROW IN SPRING. Mitchell A. Byrd banded a Lincoln's Sparrow near Williamsburg, Virginia, on 14 May 1969. There are few if any other spring records of this species from eastern Virginia.

LATE LAPLAND LONGSPUR. A Lapland Longspur seen at Chincoteague National Wildlife Refuge on 8 March 1969 was rather late for this scarce and irregular bird (M. A. Byrd, G. W. Hall, Bill Smith, & T. F. Wieboldt).

The Raven

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Courtesy of Walter Weber

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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 quarterly, containing articles about Virginia ornithology, as well as news of the activities of the Society and its chapters.

4. 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 \$1.00 for junior members (students), \$2.00 for active members, \$4.00 for sustaining members, \$50.00 for life members.

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TECHNIQUES FOR TESTING THE SPECIFICITY OF THE "ASSEMBLY CALL" IN THE COMMON CROW

DWIGHT R. CHAMBERLAIN and CAROL M. FIELDS

Introduction

Bio-acoustics has developed rapidly in the past decade as a tool in the study of communicative mechanisms in wild birds. The Common Crow (*Corvus brachyrhynchos*) is an ideal experimental subject for this type of research. The casual observer of crow behavior can detect changes in pitch and rate of call delivery (Johnston, 1961: 15) indicative of the communicative potential and behavioral complexity of crow vocalizations.

Good (1952) discusses the meanings of a number of Common Crow vocalizations including the "rally" or "assembly call" emitted after sighting or hearing a crow predator. The "assembly call" has been tested with American and French crows, both in France and the eastern United States (Frings *et al.*, 1958). These workers tabulated positive responses to this call. Chamberlain (1967) undertook intensive documentation of the sounds produced by the Common Crow including the "assembly call," an intense and raucous "mobbing call" containing long notes (wide band width of individual call notes) which is given when crows see or hear a nearby crow predator.

Frings *et al.* (1958) and Chamberlain (1967) exposed Common Crows to recordings of sympatric bird species including sounds of gulls, ducks, wild Turkeys, Starlings, and grackles without any observable effect on the movements of crows.

The objectives of this paper are, first, to present varying techniques for testing, tabulating, and validating the "assembly call" of the Common Crow and, secondly, to show that, indeed, the "assembly call" of the Common Crow does influence the behavior of coinhabiting bird species.

Results and Discussion

The "assembly call" has the apparent function of calling together a group of crows so that the group might drive predators away from locations frequented by crows, such as nesting, roosting, or feeding areas. The "assembly call" in the Common Crow aggregates to the sound source Common and Fish Crows (*Corvus ossifragus*) which are within hearing range. Crows emit "assembly calls" day or night (Chamberlain, 1967).

Frings *et al.* (1958) tested the "assembly call" during the daytime only. These workers produced copies of original field recordings of the call on continuous-loop tape cartridges play by a message repeater through a Stromberg-Carlson amplifier, Model AU-42, and University speakers, Model PA-30. The broadcasting equipment was carried in an automobile to suitable locations and the sounds were broadcast at approximately 120 db at 1 m from the speaker. Ordinarily, no crows were in sight at the start of the tests. The recorded sequences were of either 1 or 3 minutes duration and were repeated to give totals of 6, 9, or 10 minutes. Crow counts were made of birds which were in sight at 30-second intervals during the broadcasting of sound. These researchers state that the "assembly call" is given when crows sight an owl or a cat.

Reactions to field tests of calls were classified into three major and some minor categories by Frings *et al.* (1958). When the crows flew up from the ground, circled to gain altitude, and approached the speaker, the response was

called positive phonotaxis. Positive phonotaxis was divided into five classes as follows:

- +++ , if the reaction was immediate and direct
- ++ , if the reaction was good but not immediate
- + , if only part of the flock was attracted
- + - , if some were attracted while others flew away
- + o , if some approached the sound source while others remained on the ground

Three classes of negative phonotaxis were recognized by Frings *et al.* (1958) as follows:

- , if the crows all flew away
- o , if only part flew away while the others remained on the ground
- o , if there was no apparent reaction to the "assembly call"

In summer in Maine, the "assembly call" produced strong positive phonotaxis, and in 27 out of 30 tests flocks of crows numbering 2 to 30 came to the sound source within 1 to 5 minutes. In winter in Pennsylvania, 50 field tests brought groups of 5 to 200 crows to the "assembly call," 45 times within 6 minutes (Frings *et al.*, 1958). They found that by placing a mounted Great Horned Owl (*Bubo virginianus*) near the sound source, crows would remain nearby for longer periods than without visual reinforcement. These workers stated that crow calls in general, except for a few cases, "... had no influence on the behavior of other birds in the neighborhood," irrespective of the season.

Chamberlain (1967) recorded and tested crow "assembly calls" in Virginia, Maryland, Maine, and New York. Tests of selected calls were transcribed onto continuous-loop tapes from the original field tapes. Loop tape tests were made from an automobile using a Wollensack Model 1700-T tape recorder with a built-in inverter and a U. S. Army cone speaker powered by a 12-volt car battery. The speaker was mounted on a ski rack on top of the vehicle during field tests. Test tapes were broadcast to crows from roads *only* after the birds were observed. Every attempt was made to conceal the automobile and testing equipment from direct observation by crows in the field. Crow responses to the "assembly calls" tested were classified by the following phonotactic system derived from that of Frings *et al.* (1958):

- CLASS I: Specific predicted response of crows within the estimated hearing range.
- CLASS II: Only "part" (the "part" was quantified as much as possible by field observation) of the crows within the estimated hearing range responded as predicted, while the remainder did not respond at all.
- CLASS III: Only "part" of the crows within the estimated hearing range responded as predicted, while the remainder reacted in other than the predicted manner.
- CLASS IV: No response among crows within the estimated hearing range.
- CLASS V: Nonpredicted response by crows within the estimated hearing range.

This ranking scheme was used for field classification of crow behavioral responses to broadcasts of "assembly calls." The expected response (aggregation to sound source) was predicted prior to broadcast. Actual responses were compared to the prediction as a confirmation of the effectiveness of the particular "assembly call." In 30 tests conducted in four states throughout the year, the responses clustered as follows:

CLASS I,	27 tests (91%)
CLASS II,	2 tests (6%)
CLASS III,	1 test (3%)
CLASS IV,	none
CLASS V,	none

It can be seen that the "assembly call" produces the predicted result, namely aggregation to the sound source. Data on the reactions of sympatric bird species to crow "assembly calls" were not collected during the 1967 study.

The Zoology 235 class at the University of Maryland conducted similar field experiments with the crow "assembly call" during April-May 1969 in Maryland. These workers analyzed and tested "assembly calls" which were recorded one May in Virginia. The call sequence was considered typical, since the vocalization was emitted by a crow "mobbing" a stuffed Great Horned Owl. The natural call sequence was 1 minute 50 seconds long. This call sequence was comprised of 18 phrases, each of which contained notes. A phrase is considered a spiked "blip" on a chart recorder composed of a number of spikes (the notes) and separated by a space from the next "blip" or phrase. A second tape was prepared from the natural tape consisting of a single repeating "average" call. This call consisted of the average note length (in centimeters per call), the average number of notes per phrase, the average phrase length, and the average distance between phrases. This tape was also spliced to be 1 minute 50 seconds in duration. Two reels were made. One reel contained three 1 minute 50 second sections of the natural tape separated by 10-second intervals of silence. The other contained three 1 minute 50 second sections of the prepared tape separated by 10-second silent periods. Reels were broadcast alternately in the field. Each test of one reel lasted 6 minutes. The objectives were, first, to determine whether there was a significant variation in response by crows to the natural and prepared tapes of the "assembly call" and, secondly, to note any phonotactic responses to the natural and prepared calls by coinhabiting bird species.

Broadcasts were made from an automobile using a Uher 4000 Report-L tape recorder and a portable two-directional amplifier and speaker mounted on the car top. Broadcasts were made from roads, but generally no crows were in sight at the start of the tests. Testing locales were selected on the basis of recent spring sightings of crows at these areas. The rationale was that most of these were nesting crows and therefore would remain near the test location for approximately 7½ weeks. We estimated the maximum broadcast range to be a radius of 100 yards.

During April and May the natural tape was broadcast 14 times and the prepared tape, 11 times. No field ranking scheme was employed. Common Crows came to the sound source in 8 of 25 tests. Of these eight, six were tests utilizing the natural tape and two utilized the prepared tape. A total of 19 crows aggregated to the tapes during all tests—hardly a sufficient sample to determine which tape was more magnetic. The authors feel that a low db speaker output was primarily responsible for the sub-par responses of crows during the tests, based on the performances during previous experiments cited above. However, in 14 tests, one or more coinhabiting bird species flew to the test site after the commencement of broadcasting. These species, which included Blue Jay (*Cyanocitta cristata*), Cardinal (*Richmondia cardinalis*), Common Grackle (*Quiscalus quiscula*), Mockingbird (*Mimus polyglottos*), Chipping Sparrow (*Spizella passerina*), Starling (*Sturnus vulgaris*), Robin (*Turdus migratorius*),

and Broad-winged Hawk (*Buteo platypterus*), often emitted agonistic vocalizations around the sound source and left the immediate broadcast area after test termination. Although control sounds were not broadcast to these species, the authors believe that they arrive at the test sites to "mob" the crow supposedly giving the calls. On two occasions during testing, one of the coinhabiting bird species (Blue Jay and Common Grackle) was observed to mob crows which had also responded to the tape. Crows are known to eat the eggs and offspring of these species during April and May.

No correlation could be made between the variation in crow response to the two types of tape and such variables as test date, time elapsing before the appearance of a crow during a test, test location, or weather conditions.

This study revealed that in spring in suburban Maryland Common Crows maintain high numbers within municipal parks and in rural farmland but exhibit sparse numbers in xeric communities and populated areas lying between these two ecotypes. Between farmland and municipalities there was a virtual lack of crow response to the test tapes.

Summary

Studies by Frings *et al.* (1958), Chamberlain (1967), and the Zoology 235 class at the University of Maryland revealed that the Common Crow "assembly call" does aggregate crows and, in some cases, sympatric species to the sound source. The authors question whether or not the "assembly call" is rightfully classified as a species-specific signal by Frings *et al.* (1958), considering the interspecific effects observed. Three techniques for testing and tabulating field responses of crows to this call are presented. Results of tests performed during the three studies are summarized.

Acknowledgments

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BIRD OBSERVATIONS FROM THE NORTHERN NECK

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This paper might well be entitled "Northern Neck Miscellany" as it is a selection of records culled from a number of sources. First, continuing my observations in the area reported on earlier (Scott, 1962), I have included many of my own records made over the past 10 years. Second, many of the results of the two VSO breeding-bird forays are included (*cf.* Watson, 1968 and 1969), and third, I have used records made by a few other observers in the area, either obtaining these directly or from a few published reports.

My list of the birds of the Northern Neck contains over 240 species, and this is undoubtedly far from complete. Reasonably satisfactory though often incomplete information is available for most of the permanent residents and the regular summering and wintering birds, but the status of many of the transients is still unknown, as is that of many of the rarer birds. There are clearly insufficient data to support a complete annotated list of the birds of the area. In view, however, of the paucity of published information on the birds of this region and the possibility of the early publication of a revised check-list of Virginia birds, I thought it desirable to put some of these data on record.

The problem has been to decide which species to include and which to omit. Of necessity, these decisions have been highly subjective and would not necessarily agree with anyone else's selections. The overall criterion used, of course, was that the material had to add something to the recorded knowledge of the birds of Virginia. This may mean (1) new records of rare or unusual birds (e.g., Black Rail and Dickcissel), (2) new breeding evidence for this section of the state (e.g., Bank Swallow and Vesper Sparrow), (3) records resolving the status of certain species about which there was some question (e.g., Loggerhead Shrike and White-crowned Sparrow), and even (4) data known to many people but apparently unpublished for this area (e.g., Whistling Swan and Canvasback). The absence of certain birds is also commented on. Some emphasis has also been placed on the changes in some birds' abundance (where this is known) between the eastern edge of the area near salt water and the more westerly portions where the water is much fresher and the weather not as moderated by the Chesapeake Bay. In the way of negative information, it might be added here that the following birds were *not* found on the June 1969 breeding-bird foray, although they were specifically looked for: Sharp-shinned and Cooper's Hawks, Spotted Sandpiper, Black-billed Cuckoo, Cedar Waxwing, Warbling Vireo, Cerulean Warbler, and Henslow's and Sharp-tailed Sparrows.

As used here, the term Northern Neck means that peninsula lying between the Potomac and Rappahannock Rivers and bordered on the east by Chesapeake Bay. It includes five counties: King George, Westmoreland, Northumberland, Richmond, and Lancaster. It is approximately 75 miles long and varies in width from about 5 miles in King George County to 20 miles along the Bay. Coverage of this area has been quite uneven, and relatively little field work has been done in King George County. Much of the work has been done in northwestern Northumberland County near Lewisetta, where the Coan River flows into the Potomac, and Bon Harbors, where the Yeocomico River meets the Potomac. I have had a cottage in this area for about 4 years. Elsewhere, a great deal of field work has been done in Westmoreland County, especially at Wakefield (Washington Birthplace National Monument), Westmoreland

State Park, Stratford (R. E. Lee's birthplace), and Hollis Marsh Island, which separates Currioman and Nomini Bays from the Potomac River. Other areas which have received significant coverage are the tidal marshes and farm areas along the Rappahannock River near Warsaw, the Smith Point area where the Potomac meets the Bay (including Reedville and Dameron Marsh), and the Windmill Point and White Stone areas where the Rappahannock flows into the Bay.

Many persons have been very helpful in the field work involved in this report. Robert J. Watson directed both of the VSO forays here in 1968 and 1969 and supplied many records. Along others who made significant contributions during the forays were Ralph T. Bullard, Mrs. Herbert M. Church, W. S. Clark, James W. Eike, Mrs. H. S. Gilbert, John H. Grey, Jr., Charles W. Hacker, Mrs. Sydney Mitchell, J. J. Murray, Sr., Gertrude Prior, and Walter P. Smith. Maynard Nichols and Mr. and Mrs. W. A. Rothery, who live in the White Stone area, supplied both some records and leadership for some of the foray field parties. Much of the data on Bald Eagles, as well as some other records, has been supplied by Jackson M. Abbott, who for some years has been Chairman of the Bald Eagle Survey Committee of the Audubon Naturalists Society and has been coordinating the eagle survey work in the whole Chesapeake Bay region. Unfortunately, I have had access to only a little of the field data of the Washington area birdwatchers who occasionally visit the Wakefield area, and most of these have come from the pages of the *Wood Thrush* and *Atlantic Naturalist*. A lot of these data have often been difficult to use for my purposes, usually because necessary details were unavailable.

The following annotated list is of necessity very uneven in treatment of the various species. Arrival and departure dates are given only if I feel the ones I have are reasonably representative of the bird's occurrence. All specific observations were made by me unless otherwise indicated. I would appreciate receiving records (old or new) from other observers which supplement or disagree with any of the material given here.

Horned Grebe

Podiceps auritus (Linnaeus)

An abundant transient and common winter resident, especially along the Chesapeake Bay and in the lower parts of the rivers. It is much less abundant farther west at, for example, Wakefield than it is in the Lewisetta area. Extreme dates of occurrence are 29 October 1966 and 1967 and 9 May 1959 (Dr. & Mrs. D. F. Keeney—Berry, 1959), but there are also several late May and June records, probably of injured birds. Maximum counts usually occur in late March and April, with a peak of 410 on 9 April 1966.

Great Blue Heron

Ardea herodias Linnaeus

A rather common permanent resident, this bird is especially common in migration along the Chesapeake Bay and in the Wakefield-Hollis Marsh area. The heronry previously reported at Hollis Marsh Island (Abbott, 1955 and 1956) was apparently abandoned in 1963 and at least in part moved across the Potomac River to St. Catherine Island, St. Marys County, Maryland, where a heronry had been established at least since 1959 (Briggs, 1960). Abbott estimated 30 pairs nesting at Hollis Marsh on 25 June 1955. An unrecorded Great Blue heronry was found on Fleets Island near Windmill Point on 26

May 1967 and was estimated to contain about 30 occupied nests. Unfortunately, this colony was apparently abandoned the following year, and there are no known active heronries in the Northern Neck now. Peak counts include 63 on 10 May 1969 in the Smith Point area and 177 (including 144 on pound poles in the Potomac River) in the Hollis Marsh area on 24 May 1968 (Murray & Scott). This latter count was influenced by two large heronries in nearby Maryland.

Little Blue Heron

Florida caerulea (Linnaeus)

A fairly common transient and summer resident, 19 April 1967 to 23 October 1965. There is also a winter record of an immature at Wakefield on 18 January 1947 (Davis, 1947). There are recent June records of adult birds from Hollis Marsh, Smith Point, and Towles Point. Prior to 1963, this bird nested abundantly in the Hollis Marsh colony, and Abbott (1955) estimated 200 pairs nesting (and at least 600 individuals) here on 25 June 1955. More recently the maximum count has been only 20 at Wakefield on 17 August 1969.

Common Egret

Casmerodias albus (Linnaeus)

A common transient and summer resident, 25 March 1967 to 1 December 1968, with recent June records from most parts of the area. One winter record, a bird near Warsaw on 25 January 1969. Prior to 1963 the Common Egret was the most abundant breeding heron in the Hollis Marsh colony, and Abbott (1955) estimated 300 pairs nesting here on 25 June 1955, with a total count of over 1000 birds, probably a record for inland Virginia. A more recent peak count was 31 in the Hollis Marsh area on 13 June 1969 (Bullard *et al.*), most probably being feeding birds from the St. Catherine Island, Maryland, heronry.

Cattle Egret

Bubulcus ibis Linnaeus

This is a local and irregular spring transient in this area, and during 1968 and 1969 a few were found all summer at Wakefield, Westmoreland County. These were apparently birds feeding from the colony on nearby St. Catherine Island, Maryland, where these birds were found nesting at least as early as 1964 (Davis, 1964). Both forays recorded these birds in the Wakefield area. Maximum count, 22 on 7 June 1969.

Black-crowned Night Heron

Nycticorax nycticorax (Linnaeus)

A local summer resident, rather common along the Chesapeake Bay near Reedville, with few recent records elsewhere from Hollis Marsh, Wakefield, Warsaw, and Lewisetta. Rather large concentrations were found in the Smith Point area during the summers of 1967, 1968, and 1969, but nesting could not be proved. Recent peak count, 57 on 9 June 1968. Prior to the abandonment of the Hollis Marsh nesting colony in 1963, this bird nested abundantly there, and Abbott (1955) estimated 150 pairs nesting on 25 June 1955, with a total of at least 400 individuals seen.

Least Bittern

Ixobrychus exilis (Gmelin)

Apparently a fairly common summer resident, with records from Warsaw,

Wakefield, and Hollis Marsh. Peak count, 3 near Warsaw on 25 May 1968 (Church, Grey, and Murray).

Glossy Ibis

Plegadis falcinellus (Linnaeus)

Two definite records. Three were seen near Warsaw on 20 April 1968, and Abbott saw 5 flying over Lewisetta on 9 April 1969. There are also some unconfirmed reports from the Hollis Marsh area.

Whistling Swan

Olor columbianus (Ord)

This is a rather common winter resident along the shores of the Chesapeake Bay and Potomac River west at least to the Colonial Beach area and probably farther. (It is regularly recorded on the Brooke Christmas counts in Stafford County.) It occurs on the open Potomac River (actually in Maryland) but is probably more common on the estuaries and larger creeks draining into the Potomac. On the upper Rappahannock River it has been recorded only as a fairly common transient, chiefly in November and March. Inclusive dates of occurrence are 2 November 1969 and 28 April 1968, but most birds leave about 20 March. A late bird was seen at Hollis Marsh on 11 May 1965 and another here on 13 June 1969 (Bullard, Scott, & Watson). Several foray parties reported up to 4 birds at Wakefield 7-12 June 1969 (Mitchell, Watson, *et al.*). Peak count: 350 on 17 March 1968, but this should be easy to surpass.

Snow Goose

Chen hyperborea (Pallas)

An immature Snow Goose was seen at Wakefield on 16 January 1949 (E. G. Baldwin *et al.*—Robbins & Robbins, 1949), and according to local residents, a single Snow Goose spent the winter of 1966-67 in the Lewisetta area with a flock of Canada Geese. I saw this last bird on 25 February and 19 March 1967.

Mallard

Anas platyrhynchos Linnaeus

A rather common transient and winter resident, this bird has also been noted during the breeding season in seven locations on the Northern Neck. A female was flushed off an empty nest at Bon Harbors on 1 May 1966, and near Warsaw a female with 8 young was seen on 19 June 1967 and a female with 3 young on 26 May 1968. While the origin of many of these birds may be open to question, they nevertheless now give every indication of being a feral part of the area's birdlife. My maximum count seems to be only 179 at Wakefield on 15 February 1969.

Black Duck

Anas rubripes Brewster

Rather common in winter and migration, the Black Duck, like the Mallard, has now been found fairly commonly but locally in many locations during the breeding season. Twenty-two at Dameron Marsh on 26 May 1968 (Hacker, Scott, & Watson) is our best nesting season count. An adult with 5 young was seen near Warsaw on 15 June 1969. My maximum winter count seems to be only 165 at Wakefield on 15 February 1969.

Gadwall*Anas strepera* Linnaeus

A fairly common transient and winter resident, both in the marshes along the Rappahannock in Richmond County and on the many ponds close to the rivers and Chesapeake Bay. Inclusive dates are 25 October 1967 and 11 May 1965. There are several summer records. One was found at Hollis Marsh on 24 June 1956 (Abbott, 1956), 1 at Smith Point on 23 June 1966, 1 at Wakefield on 23 May 1968 (Smith), and 2 near Warsaw on 14 June 1969 (Mitchell *et al.*). The peak count is 300 at Wakefield on 21 January 1950 (E. G. Baldwin *et al.*—Robbins, 1950). This bird is far more common here than along the western edge of the Coastal Plain near Richmond.

Blue-winged Teal*Anas discors* Linnaeus

This is a common transient principally in the marshes of the Rappahannock near Warsaw, 8 March 1968 to 25 May 1968 (Church, Grey, & Murray) and 18 August 1966 to 27 September 1964. One was also seen near Warsaw on 27 July 1967. Maximum counts in spring: 41 on 28 March 1966 and 9 April 1964; in fall: 90 on 31 August 1966 and 147 on 7 September 1965.

Canvasback*Aythya valisineria* (Wilson)

The Canvasback probably reaches its greatest abundance in Virginia on the Potomac River, where it is abundant as a transient and winter resident, 10 November 1967 to 11 May 1965. During 1968 a few individuals remained at Hollis Marsh and Wakefield to 25 May (Hacker, Murray, *et al.*) and at Bon Harbors to 2 June. Abbott (1955) noted a pair at Hollis Marsh on 10 July 1955. It seems to be most common in King George and Westmoreland Counties, where federal game management agents have estimated up to 150,000 birds in one flock in recent years, but my maximum count is 30,000 at Stratford on 10 December 1967 (Watson & Scott). Farther east I have a number of records of 2000 to 4000 birds in the Bon Harbors and Lewisetta areas, and there are similar records for the lower Rappahannock.

Oldsquaw*Clangula hyemalis* (Linnaeus)

A common to abundant transient and winter resident on Chesapeake Bay and west up the Potomac at least to the Westmoreland County line; less common west of here. Present dates of occurrence are inadequate, and all current records are between late November and the end of March. Large flocks usually stay well offshore and can not be seen easily from land, but small numbers regularly come into the estuaries off the Potomac River. Peak count, 500 near Lewisetta on 31 March 1968.

Surf Scoter*Melanitta perspicillata* (Linnaeus)

An abundant transient and winter resident along Chesapeake Bay and the lower Potomac, all present records falling between mid October and late March. Like the Oldsquaw, this species seems to concentrate on the Potomac off Lewisetta, where I estimated 10,000 on 6 March 1964. There are insufficient records of the other two scoters to draw any conclusions at present.

Black Vulture*Coragyps atratus* (Bechstein)

A fairly common permanent resident, but much less so than the Turkey Vulture. My peak count is only 19 on 28 March 1966 in the Warsaw-Callao area. The two forays found this bird widely distributed but in small numbers.

Red-tailed Hawk*Buteo jamaicensis* (Gmelin)**Red-shouldered Hawk***Buteo lineatus* (Gmelin)**Broad-winged Hawk***Buteo platypterus* (Vieillot)

The VSO Northern Neck forays found all three of these *Buteos* to be widely distributed if rather uncommon summer residents. The Red-tailed and Red-shouldered Hawks are also fairly common and uncommon winter residents, respectively. R. J. Watson noted a remarkable northward flight of 45 Red-shouldered Hawks at Stratford on 25 May 1968, an incredibly late date for any spring hawk flight. There is one breeding record, an occupied Red-shouldered Hawk nest found in eastern King George County on 12 June 1969.

Bald Eagle*Haliaeetus leucocephalus* (Linnaeus)

A permanent resident, this bird has now declined to the point where it is at best uncommon from November to April and rare the rest of the year. A few pairs still nest in the area, however, and in recent year from two to six active nests have been found in each of the five counties, with King George and Westmoreland Counties having the highest breeding populations. Although both the Atlantic Naturalists Society and the Virginia Society of Ornithology began their official Bald Eagle surveys in 1956, it was not until 1962 that Abbott began surveying the Potomac River shores of the Northern Neck for eagle nests, and the first survey flights along the Rappahannock did not begin until 1964. Adults have been seen apparently incubating in two nests as early as 15 February 1968 (Abbott), but a few individuals apparently do not lay eggs until late March or even later. With an incubation period of about 33 days and young that remain in the nest for 10 to 12 weeks, the successful nests are usually still occupied by the young in early or mid June. Of the 14 active nests found in this five-county area in 1968, four were successful and raised 4 young (1 each). In 1969, with 13 active nests, 5 were successful and raised a total of 6 young. Unfortunately, this poor showing is probably better than that of any similar area in the Chesapeake Bay region. I estimate that at present there are probably 25 pairs of Bald Eagles attempting to nest in his five-county area. Peak counts of eagles here are usually associated with nest surveys. For example, Abbott reported 13 adults in an area-wide survey on 20 March 1968. No real winter concentrations have been reported, but 11 adults were seen along the Potomac shores of King George and Westmoreland Counties on 13 January 1962 (Abbott).

Osprey*Pandion haliaetus* (Linnaeus)

In spite of reported declines elsewhere in its range, this bird is still a common summer resident on the Northern Neck, nesting along all the rivers, larger creeks, and Chesapeake Bay. Inclusive dates of occurrence are 6 March 1964 and 5 September 1966, this latter date indicating that most breeding birds leave in August and that few fall transients have been recorded passing through.

In 1969 I kept 9 nests under cursory observation in the Bon Harbors area, 5 on offshore duck blinds, 3 in dead trees, and 1 on the chimney of a three-story farm house. Of these, at least 4 produced young birds (all on duck blinds). Some very preliminary nesting observations indicate a pair nest building as early as 25 March 1965, adults apparently incubating on 4 nests on 11 April 1967, eggs seen between 27 April 1968 and 7 June 1969, and young in nests from 7 June 1969 to 16 August 1969. In June 1934 Tyrrell (1936) made a study of the nesting Ospreys in the Smith Point area (including Little Wicomico River and Ingram Bay) and found about 70 occupied nests. I suspect a similar study today would reveal perhaps 75% of this number. More recent studies of breeding Ospreys have been done in nearby Talbot and Queen Annes Counties, Maryland, by Jan Reese (1965, 1968, & 1969).

Sparrow Hawk

Falco sparverius Linnaeus

Although this species is a common transient and winter resident, it appears to be rare in summer, with two breeding season records, 2 at Bon Harbors on 16 June 1966 and 1 at Hollis Marsh on 13 June 1969 (Bullard, Scott, & Watson). Peak count, 12 on 28 March 1966.

Pheasant

Phasianus sp.

Two species of pheasants have been artificially introduced into the Northern Neck, the Ring-necked or Black-necked Pheasant, *P. colchicus*, and the Japanese Green Pheasant, *P. versicolor*. The Ring-necked Pheasant has probably been released for many years by private landowners and in more recent years by the several game preserves in the area. These birds, probably of the races *P. c. colchicus* and *P. c. torquatus* and crosses between the two, never took hold in the wild. More recently, the Virginia Commission of Game and Inland Fisheries has introduced new strains of this species based on the Iranian Black-necked races *P. c. talischensis* and *P. c. persicus*, and between 1959 and 1961 1234 "talischensis back cross" birds were released in Richmond County and 776 "persicus back cross" birds were released in King George County. These birds have nested successfully in the wild, but their future is still uncertain.

The Game Commission also released a number of the northern race of Japanese Green Pheasants, *P. v. robustipes*, in Lancaster and Northumberland Counties in 1962-63. These have nested successfully, but their future is also uncertain, although they are still often seen in the Lewisetta area. One problem is that when the Green and Black-necked Pheasants interbreed, they apparently produce sterile offspring. A fairly recent review of the state foreign game bird program appeared in *Virginia Wildlife* (McInteer, 1965).

Since these are introduced birds and have not permanently established themselves yet, they should probably be placed on the hypothetical list.

King Rail

Rallus elegans Audubon

Clapper Rail

Rallus longirostris Boddaert

Both of these closely related rails are summer residents on the Northern Neck. The Clapper Rail is rather common in the marshes along Chesapeake Bay and up the Rappahannock River at least to Towles Point, where my peak count of 7 was recorded on 25 May 1968. It appears to be fairly common at Lewisetta on the Potomac also. The King Rail was thought by Meanley

(1969a: 32) to be rather common in the Rappahannock River marshes near Warsaw in the early 1960's, and it also seems to be fairly common at Wakefield and Hollis Marsh Island, where 5 were recorded on 13 June 1969 (Bullard, Scott, & Watson). Interestingly, Abbott (1955) reported a Clapper Rail nest with 7 eggs at Hollis Marsh on 25 June 1955 and saw one bird there on 10 July 1955. This nest is the westernmost one ever found in Virginia, being somewhat farther west than that found by Steirly (1959) at Hog Island, Surry County, and much farther "inland" from the ocean. According to my interpretation of Stewart and Robbins (1958: 126-128), both rails might be expected to breed in some of the same marshes where their ranges overlap, and Meanley (1969a: 34-36) indicates the same thing. King Rails, therefore, might be expected in most of our marshes. There is no winter data on Clapper Rails, but Meanley reported King Rails near Warsaw in the winters of 1958 and 1961. Most of these were inadvertently caught in muskrat traps.

Black Rail

Laterallus jamaicensis (Gmelin)

Two records. One was seen at Dameron Marsh on 17 April 1954 (John Terborgh—personal communication), and one was flushed out of a marsh at Lewisetta on 5 September 1966.

American Coot

Fulica americana Gmelin

As elsewhere in eastern Virginia, this is a locally common transient and winter resident, varying a lot from year to year. Inclusive dates of occurrence are 9 October 1965 and 15 May 1964, but in 1967 4 remained near Warsaw at least to 29 May and 2 at Bon Harbors at least to 5 June. In 1968 2 were seen near Warsaw on 25 May (Church, Grey, & Murray) and 3 at Dameron Marsh on 26 May (Watson & Scott). At Reedville, 1 was found swimming in Cockrell Creek (salt water) on 9 June 1962. These late dates imply that this species may nest in the area. Peak count, 300 at Wakefield on 1 December 1968.

Willet

Catoptrophorus semipalmatus (Gmelin)

A locally fairly common summer resident along the Chesapeake Bay marshes. Away from the Bay, it is a scarce to rare transient as far west as Lewisetta and Warsaw. Maximum count, 13 at Dameron Marsh on 15 June 1969 (Watson & Scott).

Dunlin

Erolia alpina (Linnaeus)

Principally a fairly common transient but also an irregular winter resident, 9 October 1965 to 9 June 1962, with most records close to the Bay. During the winter of 1965-66 some 20 birds wintered near Lewisetta, 15 miles up the Potomac River. Peak count, 59 on 28 May 1961.

Great Black-backed Gull

Larus marinus Linnaeus

This species has increased tremendously in the last few years and is now at least locally common on the Northern Neck throughout the year, especially on or close to Chesapeake Bay. Interestingly, the best counts have been made in late August and early September. Representative peak counts at Lewisetta

include 40 on 25 February 1967, 45 on 17 June 1967, 48 on 20 July 1966, 190 on 29 August 1967, 130 on 5 September 1966, and 145 on 7 October 1969. At Wakefield, 61 were found on 25 February 1968, and at Dameron Marsh, Watson and Scott recorded 84 on 15 June 1969. Many birds in full adult plumage summer along with the more usual immatures.

Herring Gull

Larus argentatus Pontoppidan

A nonbreeding but very common permanent resident, though perhaps somewhat more local in June and July. My maximum count is only 600 in the Bon Harbors area on 26 April 1967. This species usually greatly outnumbers the Ring-billed Gull in winter along the Bay and river shores but comes into the fields to feed relatively uncommonly.

Ring-billed Gull

Larus delawarensis Ord

A nonbreeding permanent resident, this bird is very common usually from November to early May and only fairly common and rather local during summer and early fall. My peak count is 700 on 12 March 1966, but higher counts should be readily attainable. This is essentially a bird of the plowed fields and other open farmland, and it is frequently seen following plows in winter and spring.

Laughing Gull

Larus atricilla Linnaeus

This is essentially a very common transient and postbreeding summer and fall wanderer, but the bird is present throughout the summer, 9 April 1964 to 23 November 1969. I have several records of 300 to 400 birds. Although adults are rather uncommon in June, immatures of the year regularly begin to arrive in early June (*cf.* Scott, 1962). This bird feeds in the fields and follows the plow very commonly.

Forster's Tern

Sterna forsteri Nuttall

A fairly common transient and nonbreeding summer visitor, becoming common in late summer and fall. Extreme dates of occurrence are 3 May 1966 and 30 November 1968 and 1969. Most June records are from the shores of Chesapeake Bay, but at other times it is regular along all the rivers and larger creeks. Apparent immature birds of the year have been seen near Warsaw as early as 18 May 1966. Maximum counts: a remarkable 130, mostly immatures, in Ingram Bay near Reedville on 9 June 1962 and 80 at Bon Harbors on 31 October 1969.

Common Tern

Sterna hirundo Linnaeus

A common transient and fairly common nonbreeding summer visitor on and near Chesapeake Bay. Less common and somewhat irregular farther west up the rivers. Inclusive dates of occurrence are 19 April 1967 and 29 November 1968, but most birds leave the area by mid September. Peak counts near Smith Point: spring, 181 on 10 May 1969; fall, 80 on 1 September 1964.

Least Tern

Sterna albifrons Pallas

A rather uncommon, irregular, and local summer resident, principally along

the Chesapeake but up the Potomac River at least to Hollis Marsh Island, 10 May 1969 to 1 September 1969. Abbott (1955) found a nesting colony (12 nests with eggs) on the Potomac at Hollis Marsh on 10 July 1955 but this was no longer there in 1968 and 1969 and could not be located by the foray parties. Elsewhere, a colony with 15 nests with eggs was located at Dameron Marsh on 9 June 1962, a small colony was discovered at Smith Point on 23 June 1966, and Nichols has found it nesting near Windmill Point. Maximum count, 35 at Smith Point on 26 May 1968.

Black Skimmer

Rynchops nigra Linnaeus

An uncommon and local transient and nonbreeding summer visitor, with all records but one from the immediate Chesapeake Bay area. Extreme dates of occurrence are 8 April 1968 (at Lewisetta—remarkably early) and 21 September 1963. Maximum count, 24 on 10 June 1961 (R. K. Williams).

Chuck-will's-widow

Caprimulgus carolinensis Gmelin

Whip-poor-will

Caprimulgus vociferus Wilson

Both of these are common summer residents, the Chuck-will's-widow more so towards the east and near the rivers and the Whip-poor-will more so in the higher central parts of the Northern Neck. The Chuck, which has been recorded as early as 19 April 1969, is common at least as far west as the Montross area of Westmoreland County. Representative comparative counts include 20 Chucks and 20 Whips in the Bon Harbors area on 25 April 1967, 18 Chucks and 13 Whips in the same area on 2 May 1966, and 2 Chucks and 15 Whips in Richmond County on 27 June 1967.

Horned Lark

Eremophila alpestris (Linnaeus)

A fairly common permanent resident, the Horned Lark was found to be widely distributed over the entire area by the two VSO forays. Two adults feeding 2 young out of the nest were found at Bon Harbors on 15 June 1968, and a recently fledged young was seen near White Stone on 16 June 1968. No large concentrations have been found, the peak count being 30 at Bon Harbors on 14 December 1968.

Tree Swallow

Iridoprocne bicolor (Vieillot)

An abundant transient, 20 March 1966 to 30 May 1969 in spring. There is no adequate fall arrival date, but the latest record is 28 October 1964. There are now several June records, indicating that it may breed here. These records include 1 near Lewisetta on 17 June 1967, 2 at Wakefield on 12 June 1969 (Mitchell *et al.*), and 2 at Towles Point on 13 June 1969 (Mitchell *et al.*). Stewart and Robbins (1958: 209-210) indicate that it is an "uncommon or rare" breeder across the Potomac in eastern St. Marys County, Maryland, but there is no recent breeding record for eastern Virginia except on the Eastern Shore. Peak counts: spring, 500 near Warsaw on 7 April 1969; fall, 1250 in the Bon Harbors area on 9 October 1965.

Bank Swallow

Riparia riparia (Linnaeus)

A fairly common transient and very local summer resident. The two VSO forays located our only known breeding colonies of this bird. Church and

Hacker found a colony at Stratford on 23 May 1968 which was examined 2 days later and found to contain 71 nests (Eike, Watson, *et al.*). Another small colony was found at Muses Beach, near Wakefield, on 12 June 1969 (Bullard). There are miles of bluffs along the major rivers and their tributaries that seem ideal for the nesting of this species, and it is strange that it is not more common. My maximum count is only 180 at Warsaw on 28 July 1968.

White-breasted Nuthatch

Sitta carolinensis Latham

One of the fascinating surprises of this review was the discovery that this bird was a scarce transient and winter resident only, with all records thus far between early November and early April. Both forays looked for this bird without success, and it was puzzling not to find it in the mature deciduous forests of Westmoreland State Park. Stewart and Robbins (1958: 227-228) indicate that it is a fairly common but highly local breeding bird on the Maryland Coastal Plain, mostly in deciduous wooded swamps. In Virginia east of the Fall Line it also seems to be confined mostly to wooded swamps during the nesting season (*cf.* Grey, 1950; Meanley, 1969b).

Brown-headed Nuthatch

Sitta pusilla Latham

A permanent resident near the rivers and Chesapeake Bay. Fairly common but local along the Bay, especially in the White Stone area (Nichols). Elsewhere, it has been noted irregularly up the Rappahannock River to Warsaw and up the Potomac to Sandy Point in eastern Westmoreland County. My peak count is 5 at Towles Point in 25 May 1968 (Hacker, Smith, *et al.*).

House Wren

Troglodytes aedon Vieillot

A fairly common transient and local summer resident. In summer it is fairly common in the White Stone and Reedville areas but is uncommon and local elsewhere. This bird obviously has not recovered here as yet from its major decline in abundance of some years ago.

Long-billed Marsh Wren

Telmatodytes palustris (Wilson)

A rather common summer resident in the salt marshes of the Chesapeake Bay and lower rivers, becoming abundant farther west in Richmond and Westmoreland Counties. The maximum count is 137 on 14 June 1969 recorded during a canoe trip through the Rappahannock and Cat Creek marshes near Warsaw (Bullard & Watson).

Loggerhead Shrike

Lanius ludovicianus Linnaeus

This is a very scarce permanent resident, with no breeding season records as yet east of King George and Westmoreland Counties. Peak count, 3 in King George County on 12 June 1969. This species appears much less common here than on the Coastal Plain just east of Richmond.

Worm-eating Warbler

Helmitheros vermivorus (Gmelin)

A local and uncommon summer resident, with no breeding season records as yet east of Richmond or central Westmoreland Counties. Peak count, 4 singing

males in Westmoreland State Park on 14 June 1969. Apparently this species requires mature deciduous woodlands, preferably on hillsides, and this habitat is rather scarce in this area.

Bobolink

Dolichonyx oryzivorus (Linnaeus)

A common transient in May and late August and early September, this species has also been recorded in June. Three were seen at Wakefield on 12 June 1969 (Mitchell *et al.*). Maximum count, 540 on 9 May 1964 (Dr. & Mrs. D. F. Keeney—Abbott, 1964).

Baltimore Oriole

Icterus galbula (Linnaeus)

An uncommon transient in May and from 18 August 1969 to 4 October 1969. There is one unusual June record, a single bird at Wakefield on 12 June 1969 (Mitchell *et al.*).

Boat-tailed Grackle

Cassidix mexicanus (Gmelin)

A local and rather uncommon summer resident along the Chesapeake Bay marshes, with a peak count of 12 on 15 June 1969 at Mosquito Island near White Stone (Mitchell *et al.*). At Lewisetta, a male was noted on 3 May 1965 and a pair on 11 May 1965, the only known records for the Potomac River. There are no winter reports as yet.

Scarlet Tanager

Piranga olivacea (Gmelin)

A common but somewhat local summer resident in the western two-thirds of the area; somewhat less common in Northumberland and Lancaster Counties. Inclusive dates of occurrence are 21 April 1968 and 4 October 1969. Peak count, 19 at Westmoreland State Park on 14 June 1969. Like the Worm-eating Warbler, this bird requires mature hardwoods for nesting, and the woodlands of the eastern part of the Northern Neck are largely loblolly pine.

Blue Grosbeak

Guiraca caerulea (Linnaeus)

A fairly common summer resident over the entire area, with all current records between early May and early September. Maximum count, 17 in the Warsaw area on 14 June 1969 (Mitchell *et al.*).

Dickcissel

Spiza americana (Gmelin)

Two records, a singing male at Bon Harbors on 16 June 1966 and another at Wakefield on 6 July 1969.

Grasshopper Sparrow

Ammodramus savannarum (Gmelin)

A common summer resident, with a spring arrival date of 22 April 1966. Curiously, this bird is locally abundant at Wakefield, where there have been many excellent counts. The peak count here was 45 on 23 May 1968 (Mitchell, Smith, *et al.*).

Sharp-tailed Sparrow*Ammospiza caudacuta* (Gmelin)

Thus far the Sharp-tailed Sparrow has been found only as a transient at Lewisetta and along the Bay in May, September, and October. Since Stewart and Robbins (1958: 354) indicated that it nested uncommonly and locally across the Potomac in Maryland, a special search was made for this bird in June, but without success. It has, however, been noted as late as 28 May 1961 at Dameron Marsh, and the peak count was 14 here on 26 May 1968 (Hacker, Scott, & Watson). It is probably only a matter of time before breeding birds are found.

Seaside Sparrow*Ammospiza maritima* (Wilson)

The Seaside Sparrow is a very common summer resident in the salt marshes of Chesapeake Bay and, on the Potomac, at Lewisetta. Inclusive dates of occurrence are 26 April 1967 and 9 October 1965. Maximum counts include 49 at Dameron Marsh on 26 May 1968 (Hacker, Scott, & Watson) and 32 at Lewisetta on 11 May 1965. Farther upstream, this bird is uncommon to scarce in summer near Warsaw (peak, 4 singing males on 14 June 1969—Bullard & Watson) and a Hollis Marsh Island (peak, 3 singing males on 13 June 1969—Bullard, Scott, & Watson). These last two localities seem to be the westernmost records in Virginia. There are no winter records as yet.

Vesper Sparrow*Pooecetes gramineus* (Gmelin)

A scarce transient and rare summer resident. There are two breeding-season records for this bird. Mrs. Mitchell found a pair near Warsaw on 24 May 1968, and 2 singing males were found fairly close together just northeast of Warsaw on 23 June 1968, one in extreme southeastern Westmoreland County and the other in extreme western Northumberland County.

Lark Sparrow*Chondestes grammacus* (Say)

One record, a bird at Bon Harbors on 5 September 1966.

Tree Sparrow*Spizella arborea* (Wilson)

An uncommon and rather irregular winter resident, with records from early January to early March. Peak count, 12 near Lewisetta on 26 January 1969.

White-crowned Sparrow*Zonotrichia leucophrys* (Forster)

An uncommon and probably somewhat local winter resident, with most records thus far from the Bon Harbors and Lewisetta area. Inclusive dates, 28 October 1964 to 11 May 1965. Peak, 14 on 8 January 1965.

Swamp Sparrow*Melospiza georgiana* (Latham)

A common transient and winter resident. There are several unusually late spring records. On 23 May 1968 one was seen along the upper Rappahannock River marshes (Clark & Gilbert) and another at Lewisetta, and 3 were found at Dameron Marsh on 26 May 1968.

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HOUSE FINCH IN LEXINGTON

JOHN P. HUBBARD

On 3 March 1969 I heard the distinctive song of a House Finch, *Carpodacus mexicanus*, near the Post Office in Lexington, Rockbridge County, Virginia. The bird sang from the top of a tall tree, and although not visible to me during the 10 minutes that I listened to it, I am certain of its identity. The song is a long continued warble, higher in pitch and not broken compared to the Purple Finch, *C. purpureus*, and interspersed at intervals is the characteristic "sweee" call note. This appears to be the first record of this bird in Rockbridge County and one of the few west of the Blue Ridge Mountains.

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NEWS AND NOTES

VSO MEMBER WRITES COLUMN. Maynard A. Nichols, one of the two VSO representatives on the Board of the Virginia Wildlife Federation, has recently been writing a regular column for the VWF publication, the *Federation Record*. Recent issues have included articles by Nichols entitled "Winter Bird Feeding," "The Wise Use of Land," "Bird Songs," "Wildlife Research," and "Back Bay Wildlife Refuge."

PHELPS ELECTED. Chester F. Phelps, Executive Director of the Virginia Commission of Game and Inland Fisheries, was elected First Vice President of the International Association of Game, Fish and Conservation Commissioners during the group's annual meeting in New Orleans, Louisiana, in early September 1969. Phelps has served 4 years on the executive board of the organization whose recent major efforts have been directed to preserving the traditional right of the states to manage and control resident fish and wildlife and opposing unreasonable and ineffective firearms control measures.

MOURNING DOVES BANDED. Personnel of the Virginia Commission of Game and Inland Fisheries banded 5000 Mourning Doves in the state during the June, July, and August trapping period, according to Game Research Biologist Jack Gwynn. This represented an increase of nearly 800 birds over the total banded in the state last year. Obtaining a large number of banded birds was especially important this year so the maximum amount of information could be obtained from the experimental daily bag limit of 18 doves in effect this fall.

SHEARWATERS KILLED ALONG COAST. A heavy kill of Greater Shearwaters apparently occurred off the East Coast in mid June 1969. In Virginia, Dr. and Drs. C. O. Handley, Jr., picked up about 75 of these birds along the beach of Assateague Island (both Virginia and Maryland) on 22 June 1969, most of which were dead. Others found dead included 2 on Dawson Shoals, near Wachapreague, on 21 June (M. A. Byrd and R. S. Kennedy), and at Fisherman Island P. A. and F. G. Buckley found 1 on 14 June, 1 on 18

June, and 3 on 24 June. Several Sooty Shearwaters were also reported but over a longer span of time. Romie Waterfield picked up a dead one at Back Bay Refuge on 24 May 1969, another was found dead at Fisherman Island on 30 May (P. A. and F. G. Buckley), a live one was seen near Smith Island on 1 June (Buckleys and Mrs. D. P. Curtis), and a dead one was picked up at Hog Island, Northampton County, on 19 July 1969 (M. A. Byrd, Mrs. M. H. Clench, and C. W. Hacker).

WHITE IBIS APPEAR AGAIN. For the second successive year immature White Ibis invaded Virginia following the nesting season and were recorded in three localities. Near Williamsburg 3 were present from 24 July to 4 August 1969 (M. A. Byrd and R. S. Kennedy), 8 remained near the North Rivanna River in Albemarle County from 6 to 9 August (C. E. Stevens), and 3 were seen at Bayville Farms, Virginia Beach, on 16 August 1969 (Mrs. F. C. Burford *et al.*).

FLAMINGO AT WAYNESBORO. Certainly the most unusual record of the summer was an American Flamingo which appeared at a golf course at Waynesboro, Virginia, on 10 August 1969 and remained until the 12th. The bird was wary, in good color, seemed healthy, and flew quite strongly. It was seen and photographed by many persons, including Mr. and Mrs. Mark D. Snyder and John F. Mehner. Excellent pictures of it at rest and in flight appeared on the first page of the *Waynesboro News-Virginian* for 11 August 1969.

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