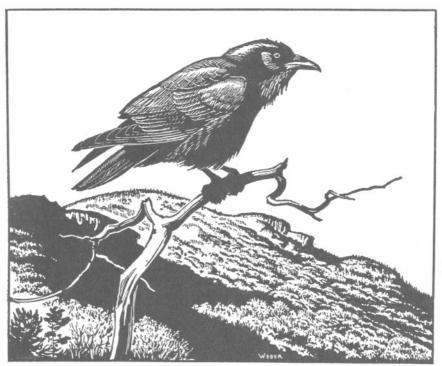
The Raven

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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), \$3.00 for active members, \$5.00 for sustaining members, \$10.00 for contributing members, \$100.00 for life members.

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Editor Emeritus: J. J. MURRAY

Editor: F. R. Scott, 115 Kennondale Lane, Richmond, Virginia 23226.

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ADDITIONAL NOTES ON DISMAL SWAMP BIRDS

BROOKE MEANLEY

The following notes on Dismal Swamp birds is the second in a series. The first, "Notes on Dismal Swamp Birds," was published in *The Raven*, vol. 40, pp. 47-49, 1969.

Recently the Union-Camp Corporation donated approximately 50,000 acres of the Dismal Swamp to The Nature Conservancy. This large and best section of the Swamp will eventually be turned over to the U.S. Department of the Interior for the purpose of establishing a wildlife refuge. This is the section of the Swamp where I do most of my birding. Lake Drummond is within the area. The forest along the northern section of Jericho Ditch is one of the most attractive in the South.

AMERICAN WOODCOCK, Philohela minor

During mild winters the Woodcock is common in parts of the Swamp, but there are few breeding season records. An adult and 4 nearly grown young were seen in the Swamp on 1 May 1971 by Phil Jones, a colleague of mine at the Patuxent Wildlife Research Center. A. K. Fisher reported 5 on 6 June 1895 (unpublished notes in the files of the Bird and Mammal Laboratories, U.S. Fish and Wildlife Service, located in the U.S. National Museum.)

RED-HEADED WOODPECKER, Melanerpes erythrocephalus

The Red-headed Woodpecker is now a rare breeding bird in the Swamp. An adult was observed feeding young on 26 June 1972.

FISH CROW, Corvus ossifragus

The Fish Crow and Common Crow, *C. brachyrhynchos*, both nest in the Dismal Swamp and occupy a large winter roost there. The average nesting period of the Fish Crow is later than that of the Common Crow. I observed a Fish Crow building a nest in the Swamp on 24 April 1971; I saw a pair feeding fledglings on 3 June 1971. In the late 1960's, the winter crow roost (both species) in the Swamp had an estimated 100,000 birds.

RED-BREASTED NUTHATCH, Sitta canadensis

A single bird seen in a stand of Atlantic White Cedar in the heart of the Swamp on 29 April 1972 is a late record of occurrence there.

SWAINSON'S WARBLER, Limnothlypis swainsonii

A nest of 3 eggs found on 1 July 1971 is the latest egg date for the species in the Swamp. This nest held 2 young approximately 5 days old on 13 July. Apparently the Swainson's Warbler departs for the south in the first half of September. I could locate none on 19 September 1971.

WORM-EATING WARBLER, Helmitheros vermivorus

In the last 7 years of observations in the Swamp, I have seen only one Wormeating Warbler during the breeding season, a bird singing near Corapeake Ditch THE RAVEN

on 4 June 1971. A. K. Fisher reported this species to be a common breeding bird in the Swamp in the Lake Drummond area during the period of 1-8 June 1895 (unpublished notes). It is a fairly common spring migrant.

WAYNE'S WARBLER, Dendroica virens waynei

There are very few summer records of this coastal form of the Black-throated Green Warbler for the Swamp, although, as stated earlier (Meanley, *op. cit.*), it is a common nesting bird here from April to early June. I saw and heard one on 1 July 1971. One seen on 18 September 1971 may have been a northern bird, *D. v. virens*, migrating. My earliest spring arrival record for the Swamp is 30 March 1973. Four were seen on this date, but I could find none the previous day.

KENTUCKY WARBLER, Oporornis formosus

The Kentucky Warbler is a rare breeding bird in the Swamp. I have seen only one pair that I am sure were breeding birds. They were first seen on 29 April 1972 and were on the same breeding territory on 28 June.

BOBOLINK, Dolichonyx oryzivorus

Bobolinks, usually found in fields and marshes, stop over in the Swamp each spring to feed (on insects?) among catkins (flowers) in the tops of oak trees, deep in the swamp. I counted 50 in such tree tops feeding along with Common Grackles, *Quiscalus quiscula*, and Red-winged Blackbirds, *Agelaius phoeniceus*, on 1 May 1968. They were also observed in the same area of the Swamp (north section of Jericho Ditch) each spring through 1972.

SCARLET TANAGER, Piranga olivacea

During seven breeding seasons of observations in the Swamp, I have observed only one pair of Scarlet Tanagers. A pair was seen on territory along the north section of Jericho Ditch on 3, 4, and 29 June and 1 July 1971. The habitat was one of the best stands of mixed swamp hardwoods in the Swamp. The Summer Tanager, *Piranga rubra*, is a fairly common breeding and summer resident in the more open and drier wooded sections of oak and pine along the margin of the Swamp.

AMERICAN GOLDFINCH, Spinus tristis

A pair seen near the junction of Jericho and Williamson Ditches on 12 July 1971 apparently is the first record during the breeding season in the Swamp. It is common there at other seasons.

Patuxent Wildlife Research Center Laurel, Maryland 20810

VIRGINIA CHRISTMAS BIRD COUNTS-1972-73 SEASON

F. R. SCOTT

Records continued to be set by the Christmas bird counts in Virginia, with only the total number of species reported this year being less than that of last year. For this count period, 386 different observers in 26 counts reported 210

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species in 1,606 party-hours of field effort. For the 1971-72 season the comparable figures were 342 observers, 214 species, 26 counts, and 1,551 partyhours. The Christmas bird count clearly remains the most popular birdwatching activity in the state.

Five species are new to the cumulative list of Virginia counts this year— Harlequin Duck, Pomarine Jaeger, Magnolia Warbler, Western Tanager, and Harris' Sparrow, and this list now stands at 266 species. The Monk Parakeet was also recorded for the first time but is not being added to the cumulative list since it is believed that the birds seen were escapes. Birds not recorded this year but seen occasionally in the past included Mute Swan, King Eider, Knot, Black Skimmer, and Long-eared and Saw-whet Owls.

Although 26 counts are included here, two others overlapped into Virginia— Seneca, Md., and Washington, D. C., and several other Virginia counts were not submitted to *The Raven*: Clark County, Danville, Nickelsville, Powhatan, and Shenandoah National Park. All of these, however, were submitted for publication in the April 1973 issue of *American Birds*. Of necessity, this summary is confined to those counts printed herein.

Several counts reported record totals this year, and Cape Charles, with 181 species, again set the all-time record for a Virginia count. In all, six counts reported over 100 species and two more had 90 or more. Coverage on most counts tends to vary from year to year, depending on the number of party leaders available to each count. This year Cape Charles had the best coverage with 150 party-hours, followed by Chincoteague with 140, Back Bay with 108, Fort Belvoir with 107, Blacksburg with 94, Little Creek with 89, and Brooke with 87.

The weather for the counts was as good as could reasonably be expected. Rain was reported on eight counts, but it was significant apparently on only two, Little Creek and Warren, both on 31 December. No falling snow was reported, and Wise County had the only ground snow cover. Those six counts that picked 16 December, the first day of the count period, had to contend with inordinately high winds following passage of a strong cold front the night before. For the third winter in a row a warm December preceding the count period helped to hold many birds in the area that might otherwise have moved farther south.

The count tabulation given in Table 1 is more or less in order of increasing distance inland from the coast. Counts 1-9 were all on the Coastal Plain, with 1-4 being directly on the coast and 5 and 6 being on the western edge of Chesapeake Bay. Counts 10-14 were on the Piedmont, and 15-26 were from the Blue Ridge westward. Details on each count are given at the end of this brief summary.

Pelagic birds were in smaller numbers along the coast than in recent years, but inland west of the Blue Ridge Common Loons were reported on two counts and Horned Grebes on six. A Red-throated Loon in Wise County was one of the few inland records of this species in Virginia. A Great Cormorant at Back Bay seems to be only the third state count record, one each having been recorded in the last two years. Wintering herons broke few records but were still in excellent numbers along the coast. Chincoteague had 63 Louisiana Herons, and Cattle Egrets were reported at Chincoteague and Back Bay. A Green Heron was seen at Back Bay, while Yellow-crowned Night Herons were noted on the two Chesapeake Bay counts. The Great Blue Heron as usual was

 TABLE 1. The 1972-73 Christmas bird counts in Virginia. The underlined figures 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.

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Common Loon	144	52	4	6	4	27			1												3	1				
Red-throated Loon	59	91	5	67		8																				1*
Red-necked Grebe	***	1																								
Horned Grebe Pied-billed Grebe	160 175	317 39	110 84	24 79	176 36	133		10										1	•••		8 11	1	1	l	3	•••
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Gannet Great Cormorant	2	137 1*	619	93	19						• • •	•••	•••	•••					••••	• • •						• • • •
Double-crested Cormorant	2	21			44																					
Great Blue Heron	84	124	55	30	20	59	12	43	39	3	1			2	1			1	2		1	3	3	2	5	
Green Heron				<u>1</u> *																						
Little Blue Heron	16	14	10	13		1																				
Cattle Egret	1*			2*																						
Common Egret Snowy Egret	97 22	23 25	26	49	4			••••				•••	•••	••••	•••		•••		•••	• • •						• • •
Louisiana Heron	63	57	1	3																						
Black-crowned Night Heron Yellow-crowned Night Heron	130	23	25	31					1																	
American Bittern	_ 9	16		13	1	2"																			•••	
Glossy Ibis	8	1																							•••	
Whistling Swan	1051	15	1	3000		71		19																		
Canada Goose	2489	5575	24	3600	1	20	8500	1	65	132	35												1+			
Brant	5520	3480																								
Snow Goose Blue Goose	10,323	21	1	29,000			21						* • •			•••										
Mallard	2 689	1 484	1 331	16 3000	218	21	250 1709	130	237	136	44			14		29	42	27	•••		56	137	33	143		***
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Black Duck Gadwall	6207	652	234	2600		2	641	375	362	110	6					13		1	1		3	9		17	5	
Pintail	273 591	46 61	4	6300 1060			413	4	1			•••			***	***	• • •	•••	••••							
Green-winged Teal	1096	101		500			415	1	2															6		
Blue-winged Teal	3*	8		9	31						1*															
American Widgeon	751	586	58	4800	316	3	96	3	4	2	4					88					4	4		7	6	
Shoveler	619	31	24	302												1			1							
food Duck Redhead	1	9	87	4			171		3	3	•••					1							1			
Ring-necked Duck	5	15 12	37 38	12	14	10	2 38	9						2		37										
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Canvasback	319	66	131	326	526	189	• • •	•••	183		••••				••••		•••	••••			1		• • • •	1		1*
Greater Scaup Lesser Scaup	94	18	3 21	17	929	8	***	1500	59					1							···;	8			2	
Scaup sp.		27				18																				
Common Goldeneye	108	164	81	1	354	144		50	5	2				1								2			1	

Bufflehead	329	3421	564	5	189	530	16	24	33	5	7					6					1.00					
Oldsquaw	253	488	84	63	107	206			4						* * *	-		***	•••		6	50		* * *		
Harlequin Duck			2*														•••							* * *		
Common Eider		1.	1.					•••										***								*
White-winged Scoter	44	103		165	65	162		***			* * *		* * *	***	***			***								
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Surf Scoter	803	763	22	161	3719	669																				
Common Scoter	144	95	30	18	21				***		•••															
Scoter sp.			482			500			8	•••																
Ruddy Duck	204	42	13	1000														***								
Houdy Dick Hooded Merganser	106	4≥ 53	26		551	310		1100	457		2					5		1					4*			
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Common Merganser	2	15	49		50	7	-		C 19.9			12														
Red-breasted Merganser	148	637	214	1115	173		20	30	631			4						***								
Turkey Vulture	137					49		30	32																	
Black Vulture		250		44		3	16	30	5	17	3	5	8	39	6	66	137	12	79	3	16	19		13	40	
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Goshawk				***			* * *	1*		***																
Sharp-shinned Hawk	9		-																							
Cooper's Hawk	-	22	3	10	1	2	2	2	2	2		3		1			2		3			1				
Red-tailed Hawk		5	2	1		* * *				1				1								3			1	1
	24	30	9	16	3		9	7	12	8	5	7	3	7	3		30	6	2	2	3	11	9	1	2	3
Red-shouldered Hawk	5	7	6	22	1		3	3	12	***												4				
Rough-legged Hawk	1	4		1*						* * *				***												
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Bald Eagle Marsh Hawk	1	1	1			2	1	4	2																	
	41	77	1	47	2	3	3	4				8					3									
Peregrine Falcon		3		1	1*					***																
Pigeon Hawk	2	3		3	1					* * *																
Sparrow Hawk	50	100	29	100	16	33	11	12	5	6	6	6	2	6		4	19	1	5		12	9	8	10	10	2
		222																								
Ruffed Grouse		2*			••••										20	1		3	2	6		10	7		2	2
Bobwhite	157	<u>2</u> * 186	12	172	40	46	52	50	70	108		···· 66		63	20 8	1 59		3 36	2 71	6	134	10 130	7 24		2	2
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Bobwhite Japanese Green Pheasant Pheasant sp. Turkoy King Eail Clapper Eail Virginia Rail Sora Black Rail Common Gallimule American Coot American Oystercatcher Semipalmated Flower Phiping Flower Killdeer	157 2* 26 6 2* 945 163 3 2 28	11 8 99 <u>25</u> 11 11 4 309 <u>334</u> 7 7 123	2 39 2 1 3 126 125	172 24 1 <u>32</u> 4 1* 5 7300 	40 14 102 137	46 14 3 	52 25 	50 4 	70 <u>1</u> * 	108 1 4 	72 	66 		63 	8 	···· ···· ··· 19 ····	46 	36 	71 		134 8 	130 	24 2 	3 45 	···· ··· ··· ···	
Bobwhite Japanese Green Pheasant Pheasant sp. Turkey King Kail Clapper Rail Sora Black Rail Common Gallinule American Gystersatcher Semipalmated Plover Phing Plover Killdeer Risck-Ballied Plover	157 2 26 6 2* 945 163 3 2 2 8 405	11 8 99 25 11 4 309 234 7 7 7 123 858	² ² ³⁹ ² ¹ ³ ¹²⁶ ¹²⁵ ³	172 24 1 <u>32</u> 4 1 2 * 5 7300 184	40 14 102 1377 37	46 14 3 	52 	50 4 1 	70 <u>1</u> * 2 	108 1 4 	72 	66 		63 	8 	 19 	46 	36 1 	71 		134 8 	130 	24 2 	3	···· ··· ··· ···	
Bobwhite Japanese Green Pheasant Pheasant sp. Turkey King Eail Clapper Eail Virginia Eail Sora Black Eail Common Gallinule American Oystaroatoher Semipalnated Flowar Phiping Flowar Killdeer Black-belied Plowar Black-belied Plowar	157 2 26 6 2* 945 163 3 2 28 405 37	11 8 99 25 11 4 309 334 7 7 123 858 134	'12 2 39 2 1 126 125 3 6	172 24 1 <u>32</u> 4 <u>1</u> * 5 7300 184 1	40 14 102 137	46 14 3 34	52 25 25	50 4 1 29	70 8	108 1 4 	72 	66 1		63 4	8 	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	46 3	36 1 18	71 		134 110	130 3 157	24 	3 45 52	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	···· ··· ··· ··· ··· ··· ···
Bobwhite Japanese Green Pheasant Pheasant sp. Turkey King Eail Clapper Bail Virginia Eail Sora Black Eail Common Gallinule American Gystersatcher Semipalmated Flower Phing Flower Killdeer Black-ballied Plower Budky Turnstone American Woodcock	157 2 26 6 2* 945 163 3 2 28 405 37 6	11 8 99 <u>35</u> 11 4 309 <u>354</u> 7 7 123 <u>858</u> 134 34	² ² ³⁹ ² ¹ ³ ¹²⁶ ¹²⁵ ³	172 24 1 <u>32</u> 4 <u>1</u> * 5 7300 184 1 14	40 14 102 137 37 2 2	45 14 3 34 	52 25 25 25	50 <u>4</u> 29	70 <u>1</u> * 8	108 1 4 	72 	66 		63 4	8 	 19 53	46 3	36 1 18 	71 21		134 110	130 	24 2 82 	3 45 52	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	
Bobwhite Japanese Green Pheasant Pheasant sp. Turkey King Kail Clapper Hail Virginia Kail Sora Black Rail Common Gallimule American Oystarcatcher Semipalanted Plowar Phing Plowar Killdeer Black-belied Plower Blady Turnstone	157 2 26 6 4 2* 945 163 3 2 28 405 37	11 8 99 25 11 4 309 334 7 7 123 858 134	'12 2 39 2 1 126 125 3 6	172 24 1 <u>32</u> 4 <u>1</u> * 5 7300 184 1	40 14 102 137 377 2	45 14 3 34	52 25 25 	50 4 1 29 	70 <u>1</u> * 8	108 1 	72 	66		63 	8 	···· ··· 19 ··· 53 ···	46 	36 1 1B 	71 		134 110 	130 	24 2 82 	3 45 52 	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	···· ··· ··· ··· ··· ··· ···
Bobwhite Japanese Green Pheasant Pheasant ap. Turkey King Kail Clapper Bail Virginia Eail Sora Black Rail Common Gallimule American Gysteroatoher Samipalmatted Flowar Philmg Flowar Killdeer Black-ballied Plowar Black-ballied Plowar Black-ballied Plowar Black-ballied Plowar Black-ballied Plowar	157 2 26 6 2* 945 163 3 2 28 405 37 6	11 8 99 25 11 4 309 254 7 7 7 7 123 856 134 34 22	'12 2 39 2 1 126 125 3 6	172 24 1 <u>32</u> 4 <u>1</u> * 5 7300 184 1 14	40 14 102 137 37 2 2	45 14 3 34 	52 25 25 25	50 4 1 29 	70 <u>1</u> * 8	108 1 4 	72 	66 1 		63 	····	···· ··· 19 ··· 53 ···	46 	36 18 	71 		134 110 	130 	24 2 82 	3 45 52 	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	····
Bobwhite Japanese Green Pheasant Pheasant ap. Turkey King Rail Clapper Hail Virginia Rail Sora Black Rail Common Gallimule American Goot American Goot American Goot American Goot Semipalmated Flower Piping Flower Killdesr Black-Bollind Flower Budy Turnstone American Hoodoock Common Enipe	157 2 26 6 3* 945 163 3 2 28 405 37 6 11	11 8 99 355 11 11 4 309 <u>334</u> 309 <u>334</u> 123 <u>858</u> 134 22 6	'12 2 39 2 1 126 125 3 6	172 24 1 <u>32</u> 4 <u>1</u> * 5 7300 184 1 14	40 14 102 137 37 2 2	45 14 3 34 	52 25 25 25	50 4 1 29 	70 <u>1</u> * 8	108 1 4 	72 	66 1 		63 	····	···· ··· 19 ··· 53 ···	46 	36 18 	71 		134 110 	130 	24 2 82 13	3 45 52 16	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	···· ···· ··· ··· ··· ··· ···
Bobwhite Japanese Green Pheasant Pheasant ap. Turkey King Kail Clapper Bail Virginis Bail Sora Black Bail Common Gallimule American Coot American Coot Samipalana ted Flowar Philip Flowar Killdeer Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar Black-ballied Flowar	157 .2* 266 2* 945 163 37 6 11 5	11 8 99 25 11 11 4 309 254 11 4 309 254 123 8 8 8 99 25 11 11 4 309 25 11 11 6 8 99 25 11 11 6 11 12 3 8 12 12 12 12 12 12 12 12 12 12	2 39 2 1 126 125 6 2 6	172 24 1 32 4 1 25 7300 184 1 14 42 	40 14 102 137 37 2 9	46 14 3 34 1 4	52 25 25 25 	50 4 29 2 1	70 <u>1</u> * 8 1	108 1 	72 	66 		63 	8 	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	46 	36 1 18 5	71 		134 110 	130 	24 2 82 13	3 45 52 16	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	223
Bobwhite Japanese Green Pheasant Pheasant sp. Turkey King Bail Clapper Bail Virginia Rail Sora Black Rail Common Gallinule American Goot American Goot American Goot American Goot Semipalmated Flower Piping Flower Raidy Turnstons American Woodoock Common Rinfor Whimbrel Willet Greater Yellowlags	157 2 2 2 6 3 4 5 7 6 11 5 7 7 7 157	11 8 99 355 11 11 4 309 324 7 7 7 123 858 858 124 34 22 6 123* 124 34 22 4 34 22 55 124 34 22 55 125 125 125 125 125 125	2 39 2 1 3 126 125 5 6 2 6	172 24 1 322 4 1 5 7300 184 1 14 42 6	40 14 102 1377 377 2 9	46 14 3 54 1 4	52 25 25 25 	50 4 29 29 21	70 <u>1</u> * 8 1 1	108 1 4 	72 	66 		63 	8 	···· ··· 19 ··· 53 ···	46 	36 1 1 1 8 5 	71 		134 	130 	24 2 82 13 	3 45 52 16	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	223
Bobwhite Japanese Green Pheasant Pheasant sp. Turkey King Rail Clapper Bail Virginis Rail Sora Black Rail Common Gallimule American Gysteroatcher Semipalmatted Flowar Philug Flowar Killder Black-bellied Flowar Black-bellied Flowar Budky Turnstone American Woodcock Common Skipe Whimbrel Willet Greater Yellowlege	157 .2* 266 2* 945 163 37 6 11 5	11 8 99 25 11 11 4 309 254 11 4 309 254 123 8 8 8 99 25 11 11 4 309 25 11 11 6 8 99 25 11 11 6 11 12 3 8 12 12 12 12 12 12 12 12 12 12	'12 39 2 1 125 5 6 2 6	172 24 1 32 4 1 25 7300 184 1 14 42 	40 14 102 1377 27 2 9	46 14 3 34 4	52 25 25 25 	50 4 29 29 21	70 <u>1</u> * 8 1 1	108 1 4 	72 	66 		63 	8 	 19 53 	46 	36 1 1 1 5 5	71 		134 110 	130 	24 2 82 13	3 45 52 16	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	223
Bobwhite Japanese Green Pheasant Pheasant ap. Turkey King Bail Clapper Bail Virginia Rail Sora Black Rail Common Gallinule American Goot American Goot American Goot American Goot Semipalmated Flower Piping Flower Raidy Turnstons American Woodoock Common Rinfor Whimbrel Willet Greater Yellowlags	157 2 2 2 6 3 4 5 7 6 11 5 7 7 7 157	11 8 99 355 11 11 4 309 324 7 7 7 123 858 858 124 34 22 6 123* 124 34 22 4 34 22 55 124 34 22 55 125 125 125 125 125 125	'12 2 39 2 1 1 26 125 3 6 2 6	172 24 1 322 4 1 5 7300 184 1 14 42 6	40 14 102 102 9 9	46 14 3 34 4	52 25 25 25 	50 4 29 21 	70 <u>1</u> * 8 1 1	108 1 4 	72 	66 		63 	8 	···· ··· 19 ··· 53 ··· ···	46 	36 1 5	71 		134 8 110 	130 	24 2 82 13	3 45 16 	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	225
Bobwhite Japanese Green Pheasant Pheasant sp. Turkey King Kail Clapper Bail Virginis Eail Sora Black Eail Common Callinule American Coot American Coot Samipalana ted Flowar Philip Flowar Killdeer Black-ballied Flowar Black-ballied Flowar	157 2* 26 6 2* 945 163 3 2 28 405 37 6 11 5 57 23	11 8 99 25 11 11 4 309 254 7 7 7 7 7 7 7 7 7 7 25 588 123 588 123 4 22 6 123 54 34 35 4 35 35 4 35 35 4 35 35 4 35 35 35 35 35 35 35 35 35 35	'12 39 2 1 125 5 6 2 6	172 24 1 32 4 1 32 4 1 32 4 1 32 4 1 32 4 1 1 32 4 1 1 32 4 1 1 32 4 1 1 32 4 1 1 32 4 1 1 32 4 1 1 32 4 1 32 4 1 32 4 1 32 4 1 32 4 1 32 4 1 32 4 1 32 4 1 32 4 1 32 4 1 32 1 3 1 3 1 3 1 3 1 3 1 3 1 1 4 4 2 1 1 1 4 2 1 1 1 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1	40 14 102 102 9 9	46 14 3 34 4	52 25 25 25 	50 	70 <u>1</u> * 8 1 1	108 1 4 	72 	66 		63 4 	8 	 19 53 	46 	36 1 1 1 1 1 3 5	71 21 1		134 110 	130 	24 2 82 13	3 45 52 16	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	223

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	1. Chincotesgue	2. Cape Charles	3. Láttle Creek	4. Back Bay	5. Newport News	6. Mathews	7. Hopewell	A. Brooke	9. Fort Belvoir	10. Charlottesville	11. Verren	12. Derlington Heights	13. Sweet Briar	14. Lønchburg	15. Big Flat Mt.	16. Rockingham Co.	17. Augusta Co.	18. Waynesboro	19. Lexington	20. Feeks of Otter	21. Roanoke	22. Blacksburg	23. Tarewell	24. Glade Spring	25. Bristol	26. Wise Co.
Date	12/28	12/27	12/31	12/29	12/30	12/30	12/16	12/18	12/23	12/30	12/31	12/30	12/28	12/16	12/28	12/16	12/22	12/16	12/26	12/28	12/16	12/27	12/21	12/23	12/30	12/16
Least Sandpiper Dunlin Short-billed Dowitcher Dowitcher sp. Semir«Luated Sandpiper	6 7424 <u>13</u> * <u>11</u> * 127	2 <u>18,369</u> 1 314	 	2 	96 	20	17 	···· ··· ···	<u>16</u> * 	···· ···	···· ····	···· ···	···· ····	···· ···· ····	···· ····		 	 	···· ····	···· ····	···· ···· ···	 	 	 	···· ···	····
Western Sandpiper Marbled Godwit Sanderling American Avocet Pomarine Jaeger	1 439 <u>1</u> * 	12 <u>63</u> * 262	65	 200 <u>1</u> *	251	125	···· ···· ····	···· ···· ····	···· ··· ···	 	···· ···	···· ··· ···	···· ··· ···	···· ···· ···	···· ····	···· ···	•••• ••• •••	···· ···· ···	···· ····	···· ····	···· ····	···· ···	···· ···· ···	···· ···· ···	···· ···· ···	•••• •••• •••
Jaeger sp. Great Black-backed Gull Herring Gull King-billed Gull Laughing Gull	246 2811 1618 2	662 9006 4366 2	440 4100 7200 20	113 1275 4000 1	153 2267 3046	101 857 321 2	95 243 1473 <u>2</u> *	60 130 130	43 694 1037	···· ····	···· ····	···· ···	···· ··· ···	···· ····	···· ···	···· ···	···· ····	···· ····	···· ···	···· ····	5 	 <u>4</u>	···· ··· ···	···· ···· ···	···· 1	••• ••• •••
Bonaparte's Gull Little Gull Black-legged Kittiwaks Forster's Tern Common Tern	171 <u>1</u> * 1	43 	113 15 	6 1	56 <u>1</u> *	···· ····	<u>65</u> * <u>1</u> *	···· ····	 	···· ····	···· ····	···· ···	···· ··· ···	···· ···· ····	···· ··· ···	···· ···	···· ···	<u>2</u> * 	···· ···	···· ····	···· ··· ···	···· ···	···· ···· ···	···· ····	···· ····	•••• ••• •••
Royal Tern Kourning Dove Monk Parakeet Barn Owl Screech Owl	166 21	2 455 4 13	10 271 6	6 324 12	335 	144 _ <u>2</u> *	364 1	140	383 1	78 	 84 	239 	62 	67 8	···· ··· ···	269 	51 1	13 1	75 2	···· ···	417 1	118 <u>2</u> *	31 1	186 1	93 	19 1
Great Horned Owl Barred Owl Short-eared Owl Belted Kingfiaber Yellow-shafted Flicker	6 1 4 56 108	10 5 33 167	4 4 30 136	9 15 22 202	 15 85	 38 66	3 4 85	2 2 55	5 2 13 63	 7 26	··· ··· 9	2 2 2 17	1 7	 16	···· ···	 6 2	···· 9 6	 6 3	 12 5	···· ····	2 4 4	 10 7	1 10 1	 12 6	1 10 6	···· ··· 3
Pileated Woodpecker Red-bellied Woodpecker Red-headed Woodpecker Yellow-bellied Sapsucker Hairy Woodpecker	11 47 2 14	1 49 5 5 22	18 38 17 3 4	31 69 4 9 8	7 28 9	1 25 1 10 2	4 37 12 1	20 60 15 9	19 80 2 6 20	15 37 6	2 23 	6 15 6 6	5 13 11 1	7 20 2 16 3	11 3	1 2 	9 11 	 6 1	7 10 4 3	6 2 3	3 4 4 5	14 22 2 3 14	5 2 2	3 5 4 	5 9 3 4 1	4 2 2 6
Downy Woodpecker Red-cockaded Woodpecker Eastern Phoebe Horned Lark Tree Swallow	52 33 	54 296 6	32 	43 1 3 4 7	27 	17 2	34 1 29	70 2	136 	49 	14 	29 2 1 	25 	59 2	15 	4 234 	25 28	7 8	31 2	12 ··· 	24 2 	46 58 	22 	26 1	18 	30 11

Blue Jay	75	25	226	169	294	158	96	220	320	73	37	14	24	105	3	25	126	33	93	7	79	88	70	80	205	
Common Raven										2				1	19	2		4	2	3	19	8	32 7		105	25
Common Crow	3898	173	211	221	314	153	287	540	417	259	159	189	15	221	9	288	694	57	345	27	283	330	50	135	138	704
Fish Crow	1642	15	137	18	46	10	14	9	41	4							560		3							304
Black-capped Chickadee									3							12	1		5			31				1
Carolina Chickadee	164	257	129	153	142	131	100	170	559	157	76	123	54	295	60	17	51	31	71	43	140	232				
Chickadee sp.																				42	140	252	65	59	71	83
Tufted Titmouse	101	42	77	62	76	43	55	105	327	83	20	25	22	190	23	8	45	16	67	10	119	183	77	55	49	81
White-breasted Nuthatch	1	6	4	8	2	2	5	6	31	21	4	5	12	14	13	8	12	8	7	9	12	44	5	21	49	13
Red-breasted Nuthatch	23	46	1	1	2		1	4	8	11	1	30	1	11		1					5	12			7	2
Brown-headed Nuthatch	75	79	16	53		16																				
Brown Creeper	33	20	7	23	7	5	14	12	69	13		15	4	14	1		4	1	2		5	5	1	2	4	4
House Wren	10	34	2	64		1		1*	2												1*	1*				
Winter Wren	12	52	10	41	9	1	4	7	22	4	1	6		15	3				4		2	9	1	1		2
Carolina Wren	126	272	122	210	154	71	91	70	226	59	7	32	7	60	3	4	16	5	21	6	31	59	8	26	24	22
Long-billed Karsh Wren	20	39	3	71	8			1		1*																
Short-billed Marsh Wren	5	33	1	30	***	4			* * *																	
Mockingbird	51	90	101	104	164	105	64	60	100	52	42	35	49	92		20	76	19	38	4	78	92	12	36	54	21
Catbird Brown Thrasher	22	28	16	78	8	15			1					1											1	1*
	13	11	22	30	14	22	12	2	3			1							••••		1		1	1	3	<u>1</u> *
Robin	835	98	194	503	42	284	58	19	114	10	15	26	3	7	18	2			3		10	8	6	3	42	23
Hermit Thrush	19	25	10	23	2	1	3	11	19	5	1	1		2								1		1		5
Swainson's Thrush	1*		• • •																							
Gray-cheeked Thrush Eastern Bluebird		***		***				* * *	* * *																	1*
Lastern Bluebird	54	9	3	13		28	22	89		26	12	22	2	17		16	21			4	5	13	- 4	1	5	12
Blue-gray Gnatcatcher				1.																						
Golden-crowned Kinglet	112	112	92	81	41	27	48	42	237	140	26	99	4	96	3	8	16	29	6		32	53	5	10	19	32
Ruby-crowned Kinglet	47	92	60	122	40			5	15	4																
					40	20	115	2	10	4	4	13		31					1		9	6		1	2	
Water Pipit	3	387	314	261								32*										6	 8*	1	2	32
											100000			-					-				<u>8</u> *	-		24
Water Pipit Cedar Waxwing Loggerhead Shrike	3 26	387 30 1	314 73 1	261 4 2	 96 3							32*										• • • •	<u>8</u> *			
Water Pipit Cedar Waxwing Loggerhead Shrike Starling	3 26 1398	387 30 1 7309	314 73 1 7300	261 4 2 249			286	160	***	33		<u>32</u> * 95								:::		 3	^{8*}	26 3		2
Water Pipit Cedar Waxwing Loggerhead Shrike Starling White-eyed Vireo	3 26 1398	387 30 1 7309 <u>1</u> *	314 73 1 7300	261 4 249 <u>2</u> *	96 3 4845	 33 1	286 6	160 4	*** 89	33 4		32* 95		8	····		···· 5	 1		::: 			<u>8</u> *	26		2
Water Pipit Cedar Waxwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo	3 26 1398	387 30 1 7309 <u>1</u> *	314 73 1 7300 <u>1</u> *	261 4 249 <u>2</u> * <u>1</u> *	96 3 4845	 33 1300 	286 6 1278 	160 4 860	 89 1570	33 4 701	 5 562	32* 95 12 619	 5 354	8 1 2123	····	 2 1956	 5 5185	 1 6759	 3 1206	 7	 4 3579	 3 4300	² 2780	26 3 2748	 3 15.010	2 3 183
Water Pipit Cedar Waxwing Loggerhead Shrike Starling White-eyed Vireo	3 26 1398	387 30 1 7309 <u>1</u> *	314 73 1 7300	261 4 249 <u>2</u> *	96 3 4845	 33 1300	286 6 1278	160 4 860	89 1570	33 4 701	5 562	32* 95 12 619	5 354	8 2123	····	 2 1956	 5 5185	 6759	 3 1206	···· ···	 3579	 3 4300	<u>8</u> * 2780 	26 3 2748	 <u>3</u> <u>15,010</u> 	2 3 183
Water Fipit Codar WaxWing Loggerhead Shrike Starling White-eynd Yireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler	3 26 1398	387 30 1 7309 <u>1</u> * 3	314 73 1 7300 <u>1</u> *	261 4 249 <u>2</u> * <u>1</u> * <u>1</u> *	96 3 4845	 33 1300 	286 6 1278 	160 4 860	89 1570	33 4 701	5 562	32* 95 12 619	5 354	8 2123	····	2 1956	5 5185	 6759 	3 1206	···· 7	3579	3 4300 	<u>8</u> * 2780 	26 3 2748 	 <u>3</u> <u>15,010</u> 	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyad Vireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Onasbwille Warbler	3 26 1398 	387 30 1 7309 <u>1</u> * 	314 73 1 7300 <u>1</u> *	261 4 249 <u>2</u> * <u>1</u> * <u>1</u> *	96 3 4845 	 33 1300 	286 6 1278 	160 4 860 	89 1570	33 4 701 	5 562	32* 95 12 619	5 354 	 8 2123 	···· ··· ···	2 1956 	 5 5185 	 6759 	3 1206 	···· 7	 3579 	 4300 	<u>8</u> * 2780 	26 3 2748 	 3 <u>15,010</u> 	2 3 183
Water Fipit Cedar WaxWing Loggerhead Shrike Starling White-eyed Yireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Nasbville Warbler Nasbville Warbler	3 26 1398 	387 30 1 7309 <u>1</u> * 3 <u>2</u> *	314 73 1 7300 <u>1</u> * 	261 4 249 <u>2</u> * <u>1</u> * <u>1</u> *	96 3 4845 	33 1 1300 	286 6 1278 	4 860 	89 1570 	33 4 701 	5 562	32* 95 619 	5 354 	 8 2123 	···· ···· ···	2 1956 	 5 5185 	 6759 	3 1206 	····	3579	 3 4300 	<u>8</u> * 2780 	26 3 2748 	 <u>3</u> <u>15,010</u> 	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Nashvile Warbler Ngrtle Warbler	3 26 1398 1490	387 30 1 7309 <u>1</u> * 3 <u>2</u> * 7332	314 73 1 7300 <u>1</u> * 400	261 4 249 <u>2</u> * <u>1</u> * <u>1</u> * 4236	96 3 4845 1447	33 1 1300 1742	286 6 1278 100	160 4 860 15	89 1570 57	33 4 701 	5 562	32* 95 12 619 	5 354 	 8 2123 	····	2 1956 	 5 5185 	1 6759 	3 1206 	···· 7 ····	3579 	 3 4300 	<u>8</u> * 2780 	26 3 2748 	 <u>15.010</u> 	2 3 183
Water Fipit Cedar WaxWing Loggerhead Shrike Starling White-eyed Yireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Nasbville Warbler Nasbville Warbler	3 26 1398 	387 30 1 7309 <u>1</u> * 3 <u>2</u> *	314 73 1 7300 <u>1</u> * 	261 4 249 <u>2</u> * <u>1</u> * <u>1</u> *	96 3 4845 	33 1 1300 	286 6 1278 	4 860 	89 1570 	33 4 701 	5 562	32* 95 619 	5 354 	1 2123 	····	2 1956 	5 5185 	1 6759 	3 1206 	····	3579 	 3 4300 	<u>8</u> * 2780 	26 3 2748 	 <u>15.010</u> 	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Yireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Nambville Warbler Regnolia Warbler Blackpoli Warbler Pine Warbler	3 26 1398 1490 7	387 30 1 7309 <u>1</u> * 3 <u>2</u> * 7332	314 73 1 7300 <u>1</u> * 400	261 4 249 <u>2</u> * <u>1</u> * <u>1</u> * 4236	96 3 4845 1447	33 1 1300 1742	286 6 1278 100	160 4 860 15	89 1570 57	33 4 701 29	5 562 6	32* 95 12 619 	5 354 	1 2123 	···· ···· ····	2 1956 	5 5185 	1 6759	3 1206 	····	4 3579 <u>1</u> *	3 4300 <u>1</u> * 5	<u>8</u> * 2780 <u>1</u> *	26 3 2748 	 <u>15.010</u> 21	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Yireo Solitary Vireo Black-and-white Warbler Orange-crowed Warbler Nashville Warbler Mgrtle Warbler Blackpoll Warbler Pina Warbler Prairie Warbler	3 26 1398 1398 1490 7 1*	387 30 1 7309 <u>1</u> * 3 <u>2</u> * 7332 5 <u>2</u> *	314 73 1 7300 <u>1</u> * 400	261 4 249 <u>2*</u> <u>1*</u> <u>1*</u> <u>1*</u> 4236 	96 3 4845 1447	33 1 1300 1742	286 6 1278 100	160 4 860 15 	89 1570 57	33 4 701 29	5 562 	32* 95 12 619 11	5 354 	8 1 2123 		2 1956 	5185 5185 	1 6759 	3 1206 	····	4 3579 <u>1</u> *	3 4300 5 	<u>8</u> * 2780 <u>1</u> *	26 3 2748 	 <u>15,010</u> 21 	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Yireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Manbrile Warbler Kagmolia Warbler Blackpoll Warbler Pine Warbler Palm Warbler Palm Warbler	3 26 1398 1490 7	387 30 1 7309 <u>1</u> * 3 <u>2</u> * 7332 	314 73 1 7300 <u>1</u> * 400 3	261 4 249 <u>2*</u> <u>1*</u> <u>1*</u> 4236 	96 3 4845 1447 1	 33 1300 1300 1300 1300 1300 1	286 6 1278 100	160 4 860 15 	89 15770 57	33 4 701 29 	5 562 6 	32* 95 12 619 11 	5 354 	1 8 1 2123 		2 1956 	5 5185 	1 6759 	3 1206 	7 7 	4 3579 <u>1</u> *	3 4300 5 	<u>8</u> * 22780 <u>1</u> *	26 3 2748 	3 <u>15,010</u> 21 	2 3 183
Water Fipit Ceder Warwing Loggerhead Shrike Starling White-eyed Yireo Solitary Vireo Solitary Vireo Black-and-white Warbler Orange-crowmed Warbler Nashville Warbler Blackpoll Warbler Pina Warbler Phairie Warbler Palais Warbler Palais Warbler Ovenbid	3 26 1398 1490 7 <u>1</u> 4 23 	387 30 1 7309 <u>1</u> * 3 <u>2</u> * 5 <u>2</u> * 130 1 <u>3</u>	314 73 1 7300 <u>1</u> * 400 3 6 	261 4 2 249 <u>2</u> ** <u>1</u> * <u>1</u> * 4236 6 16 	96 3 4845 1447 1 	 33 1 1300 1300 1300 1300 1742 	286 6 1278 1278 1200 	160 4 860 15 	89 1570 57 	33 4 701 29 	5 562 6 	32* 95 12 619 11 	5 354 	8 1 2123 		2 1956 	5185 5185 	1 6759 	3 1206 	····	4 3579 <u>1</u> *	3 4300 5 	<u>8</u> * 2780 <u>1</u> *	26 3 2748 	3 <u>15,010</u> 21 	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Yireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Manbrile Warbler Kagmolia Warbler Blackpoll Warbler Pine Warbler Palm Warbler Palm Warbler	3 26 1398 1398 1490 7 1490 7 <u>1</u> * 23	387 30 1 7309 <u>1</u> *·· 7309 2* 7332 5 2* 130	314 73 1 7300 <u>1</u> * 400 3 6	261 4 249 <u>2**</u> <u>1</u> * <u>1</u> * 4236 6 16	96 3 4845 1447 2	33 1 1300 1742 1742 	286 6 1278 1278 100 	160 4 860 15 	89 1570 57 	33 4 701 29 	5562 	32* 95 12 619 11 	5 354 	8 1 2123 		2 1956 	5 5185 	1 6759 	3 1206 		4 3579 <u>1</u> *	3 4300 <u>1</u> * 5 	<u>8</u> * 2780 <u>⊥</u> *	26 3 2748 	3 <u>15,010</u> 21 	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Orange-crowned Warbler Nestwile Warbler Myrtie Warbler Piak Warbler Piak Warbler Piak Warbler Prairie Warbler Prabler Orenbird Yellow-breasted Chat	3 26 1398 1490 1490 14 	387 30 1 7309 <u>1</u> * 7332 5 <u>2*</u> 10 <u>1</u> *	314 73 1 7300 <u>1</u> * 400 5 13 	261 4 249 2* 1* 1* 4236 4236 16 106 	96 3 4845 1447 1 1 1	33 1 1300 1742 1 	286 6 1278 100 	160 4 860 15 	89 1570 57 	33 4 701 29 	5 562 6 	32* 95 12 619 11 11 	5 354 	8 1 2123 		2 1956 	5 5185 	1 6759 	3 1206	7	4 3579 	3 4300 5 	<u>8</u> * 22780 <u>1</u> * 	26 3 2748 	3 15.010 21 	2 3 183
Water Fipit Cedar Warwing Logerhead Shrike Starling White-eyed Yireo Solitary Vireo Solitary Vir	3 26 1398 1398 1490 1490 1490 14 23 14 	387 30 1 7309 <u>1</u> * 7332 7332 5 <u>2</u> * 130 <u>1</u> * 10	314 73 1 7300 400 6 13 299	261 4 249 2** <u>1</u> * 4236 16 106 	96 3 4845 1 1447 1 1 433	33 1 1300 1742 1742 4	286 6 1278 100 100 	160 4 860 15 90	89 1570 57 1	33 4 701 29 	5 562 6 6 34	32* 95 12 619 11 11 11 	5 354 	1 2123 		2 1956 	5 5185 	1 6759 	3 1206 	····	4 3579 1*	3 4300 <u>1</u> * 5 	<u>8</u> * 2 2780 	26 3 2748 	3 <u>15</u> .010 21 	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Nashvile Warbler Myrtle Warbler Plackupoll Warbler Plackupoll Warbler Plackupoll Warbler Palmie Warbler Ovenbird Yellow-breasted Chat Bouse Sparrow Eastern Neadowlark	3 26 1398 1398 1490 1490 1490 1490 1490 1490 1490 1490 1490 1496 	387 30 1 7309 <u>1</u> * 7332 2* 5 <u>2*</u> 120 <u>1</u> 388 364	314 73 1 77500 2* 400 13 299 161	261 4 249 2* 1* 1* 4276 4276 16 106 423 721	96 3 4845 1447 1 1 1	33 1 1300 1742 1742 4	286 6 1278 100 	160 4 860 15 	89 1570 57 1 1	33 4 701 29 	5 562 6 	32* 95 12 619 11 	5 354 	**************************************		2 1956 	5 5185 	1 67559 	3 1206	····	4 3579 	3 4300 5 	<u>8</u> * 22780 <u>1</u> * 	26 3 2748 	3 15.010 21 	2 3 183
Water Fipit Cedar Warwing Logerhead Shrike Starling White-eyed Yireo Solitary Vireo Solitary Vireo Marbier Pine Warbler Palrie Warbler Palrie Warbler Palrie Warbler Palse Warbler Yellow-breated Chat Bouse Sparrow Eastern Neadowlark Yellow-breaded Elackbird	3 26 1398 1490 7 <u>1</u> 4 23 14 14	387 30 1 7309 <u>1</u> * 7332 7332 5 <u>2</u> * 130 <u>1</u> 388 368 368 <u>3</u> 68 <u>3</u> 68 <u>4</u> 8 <u>8</u> 8 <u>3</u> 68 <u>8</u> 8 <u>8</u>	314 73 1 7300 4 0 6 13 299 161	261 4 2 249 <u>2*</u> <u>1*</u> 4236 106 4233 721	96 3 4845 1447 2 1 433 251	33 1 1300 1742 1742 4 4 41 128 	286 6 1278 100 100 100 	160 4 860 15 90 184	89 1570 57 1 1 216 3	33 4 701 29 29 	5 562 6 34 85	32* 95 12 619 11 11 11 11 147 318	5 354 	**************************************		2 1956 	5 5185 	1 6759 	3 1206 	7 	4 3579 <u>1</u> * 1 	3 4300 5 5 	<u>8</u> * 2780 	26 3 2748 	3 15,010 21 85	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Nashvile Warbler Myrtle Warbler Plackupoll Warbler Plackupoll Warbler Plackupoll Warbler Palmie Warbler Ovenbird Yellow-breasted Chat Bouse Sparrow Eastern Neadowlark	3 26 1398 1398 1490 1490 1490 1490 1490 1490 1490 1490 1490 1496 	387 30 1 7309 <u>1</u> * 7332 7332 5 <u>2</u> * 130 <u>1</u> 388 368 368 <u>3</u> 68 <u>3</u> 68 <u>4</u> 8 <u>8</u> 8 <u>3</u> 68 <u>8</u> 8 <u>8</u>	314 73 1 77500 2* 400 13 299 161	261 4 249 2* 1* 1* 4276 4276 16 106 423 721	96 3 4845 1447 1 1 1 1 1 433 251	33 1 1300 1742 1742 4 4 41 128	286 6 1278 100 141 224	160 4 860 15 15 90 184	89 1570 57 1 216 3	33 4 701 29 29 	5 562 6 6 344 85	32* 95 12 619 11 11 11 147 318	5 354 40 61	**************************************		2 1956 268 136	5 5185 	···· 1 6759 ···· ··· ··· ··· ··· ··· ···	3 1206 	····	4 3579 <u>1</u> * 1 3773 6	3 4300 5 334 118	<u>8</u> * 2780 255 41	26 3 2748 346 26	3 15,010 	2 3 183 237
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo Black-and-white Warbler Orange-crowned Warbler Nashvile Warbler Mashvile Warbler Plackpoll Warbler Plackpoll Warbler Plaine Warbler Palite Warbler Palite Warbler Venlow-threat Yellow-breasted Chat Boues Sparrow Zeastern Neadowlark Yellow-besded Elackbird med-winged Elackbird Baltimore Oriole	3 26 1398 1490 1490 1490 1490 1490 1490 1490 1490 1490 138 1398 	387 30 1 7309 1* 7332 7332 7332 10 1 388 364 1 388 364 1 388 364 1 1 388 364 1 1 1 1 1 1 1 1 1 1 1 1 1	314 730 1 7300 4 400 13 6 13 999 161 ,000,000 2*	261 4 249 2* 1* 4236 16 16 16 123 721 14,400 	96 3 4845 1447 1 447 1 1 435 251 903 6	33 1 1300 1742 1742 1742 4 4 913 	286 1278 100 141 224 823 	160 4 860 15 15 90 184 	89 1570 57 1 216 3 	33 4 701 29 	5 5562 6 6 34 85 164 	32* 95 12 619 11 11 147 318 287 	5 354 40 61 	8 1 2123 		2 1956 268 136	55185 5185 383 112	 1 6759 	3 1206 	7 7 	4 3579 	3 4300 5 	<u>8</u> * 2780 	26 3 2748 	3 15,000 21 	2 3 183
Water Fipit Cedar Warwing Logerhead Shrike Starling White-eyed Yireo Solitary Vireo Solitary Vireo Solitary Vireo Solitary Vireo Solitary Vireo Solitary Vireo Solitary Vireo Nagnola Warbler Magnola Warbler Pine Warbler Prairie Warbler Prairie Warbler Prairie Warbler Ovenbird Yellow-breasted Chat Bouse Sparrow Eastern Neadowlark Yellow-beaded Elackbird ned-winged Elackbird Baltimore Oriole Rusty Elackbird	3 26 1398 1490 1490 14 23 14 8136 8136 8136 	367 30 1 7309 1* 3 2* 7332 7332 7332 5 2* 130 1 388 10 1 388 364 127	314 730 1 7300 4 400 6 13 299 161 ,000,000 2 [*] 26	261 4 2 249 2* 1* 1* 4236 16 106 106 14,400 1100	96 3 4845 1447 1 4447 1 2 1 903 6 1	33 1 1300 1742 1742 4 913 	286 6 1278 100 10	160 4 860 15 15 90 184 640 	89 1570 57 1 1 216 3 685 	33 4 701 29 64 55 12	5562 562 6 6 85 164 	32* 95 12 619 11 11 11 287 	5 354 40 61 1	**************************************		2 1956 268 136 2	55185 	1 6759 122 120	3 1206 	····	 4 3579 1 3773 6 1	3 4300 1* 5 334 118	<u>₿</u> * 2780 <u>1</u> * 255 41 14	26 3 2748 346 26 1	 <u>15,00</u> 21 85 68 350	2 3 183 237 81 5
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo Black-and-white Warbler Orange-crowed Warbler Nashvile Warbler Mashvile Warbler Pinarie Warbler Plackeyoll Warbler Plackeyoll Warbler Palrie Warbler Palrie Warbler Palrie Warbler Palrie Warbler Yellow-breasted Chat Boue Sparrow Yellow-breasted Chat Bustern Factowlark Yellow-beaded Elackbird med-winge Elackbird Beltimore Oriole Basty Blackbird	3 26 1398 1398 1490 1490 1490 1490 1490 1490 	367 30 1 7309 1* 7332 7332 7332 7332 7332 1 3 8 3 8 3 8 3 8 3 8 1 1 1 1 1 1 1 1 1 1 1 1 1	314 730 1 7300 4 4 00 13 6 13 6 13 6 13 299 161 ,000,000	261 4 2 249 2* 1* 1* 4236 16 16 16 16 16 14, 400 14, 400 14, 400 	96 3 4845 1447 1 447 1 447 1 447 1 433 251 903 6 1 	33 1 1300 1742 1742 4 4 913 	2006 1278 1278 100 	160 4 860 15 90 184 640	89 1570 57 1 216 216 3 	33 4 701 29 64 55 	5552 552 6 345 85 164 164	22* 95 619 12 619 11 11 11 11 147 318 287 	5 354 40 61 	8 1 2123 		2 1956 268 136 136 2	5185 5185 	1 6759 	3 1206 	7 7 	 3579 1 3773 6 1	3 4300 5 	<u>8</u> * 2780 	26 3 2748 	3 15.010 21 21 	2 3 183
Water Fipit Cedar Warwing Logerhead Shrike Starling White-eyed Yireo Solitary Vireo Solitary Vireo Solitary Vireo Solitary Vireo Solitary Vireo Solitary Vireo Rappola Warbler Mappola Warbler Pine Warbler Prairie Warbler Prairie Warbler Prairie Warbler Prairie Warbler Ovenbid Yellow-breated Chat Boues Sparrow Eastern Meadod Blackbird med-winged Elackbird Beat-tailed Grackle	3 26 1398 1490 1490 1490 14 23 14 8136 8136 8136 8136 8136 8136 	387 30 1 7309 1 3 2 4 7352 2 5 2 4 3 6 4 130 1 388 364 4236 3 1 27 2 1 27 2 1 8 27 1 27 130 130 130 130 130 130 130 130 130 130	314 730 2* 400 3 6 299 161 26 22* 	261 4 2 249 2** 1* 1* 4256 4256 16 106 14.400 1100 1157	96 3 4845 1447 1 447 2 1 447 2 1 903 6 1 903 6 1 	33 1300 1742 1742 1742 4 913 10	2006 1278 1278 100 100 141 224 823 399 	160 4 860 15 90 184 640	89 1570 57 1 1 216 3 685 	33 4 701 29 64 55 12	552 562 6 85 164 	32* 95 12 619 11 11 11 287 	5 354 	**************************************		2 1956 268 136 2 2 	55185 	1 6759 	3 1206 	····	4 3579 <u>1</u> * 1 3773 6 1	 4300 11 11	<u>8</u> * 2780 <u>1</u> * 255 41 14 3 	26 3 27748 346 26 1	···· 3 15,010 ···· 21 ···· 21 ···· ··· ··· ··	2 3 183
Water Fipit Cedar Warwing Loggerhead Shrike Starling White-eyed Vireo Solitary Vireo Black-and-white Warbler Orange-crowed Warbler Nashvile Warbler Mashvile Warbler Pinarie Warbler Plackeyoll Warbler Plackeyoll Warbler Palrie Warbler Palrie Warbler Palrie Warbler Palrie Warbler Yellow-breasted Chat Boue Sparrow Yellow-breasted Chat Bustern Factowlark Yellow-beaded Elackbird med-winge Elackbird Beltimore Oriole Basty Blackbird	3 26 1398 1398 1490 1490 1490 1490 1490 1490 	387 30 1 7309 1 3 2 4 7352 2 5 2 4 3 5 2 1 10 10 1 388 364 127 1 27 127 127 127 127 127 127 127 12	314 730 1 7300 4 4 00 13 6 13 6 13 6 13 299 161 ,000,000	261 4 2 249 2* 1* 1* 4236 16 16 16 16 16 14, 400 14, 400 14, 400 	96 3 4845 1447 1 447 1 447 1 447 1 433 251 903 6 1 	33 1 1300 1742 1742 4 4 913 	2006 1278 1278 100 	160 4 860 15 90 184 640	89 1570 57 1 216 216 3 	33 4 701 29 64 55 	5552 552 6 345 85 164 164	22* 95 619 12 619 11 11 11 11 147 318 287 	5 354 40 61 	8 1 2123 		2 1956 268 136 136 2	5185 5185 	1 6759 	3 1206 	7 7 	 3579 1 3773 6 1	3 4300 <u>1</u> * 5 334 118 	<u>8</u> * 2780 	26 3 27748 346 26 1	3 15.010 21 	2 3 183 237 81 3 237 81 2 2

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	Ciúncoteague	Cape Charles	Little Creek	Back Bay	Newport News	Mathews	Hopewell	Brooke	Fort Belvoir	Charlottesville	Warren	Darlington Heigh	Sweet Briar	Lynchburg	Big Flat Mt.	Kockingham Co.	Auguste Co.	Waynesboro	Lexington	Peaks of Otter	Roanoke	Blacksburg	Tazevell	Glade Spring	Bristol	Wise Co.
	1.	5	3.	*	5.	.9	7.	ŵ	.6	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.
Date	12/28	12/2	7 12/31	12/29	12/30	12/30	12/16	12/18	12/23	12/30	12/31	12/30	12/28	12/16	12/28	12/16	12/22	12/16	12/26	12/28	12/16	12/27	12/21	12/23	12/25	12/1
Brown-headed Cowbird Western Tanager Cardinal Evening Grosbeak Purple Finch	83 250 104 42	2142 365 105 36	1300 297 103 80	3120 <u>1</u> * 324 70 49	554 251 115 92	53 268 200 25	340 240 224 52	 310 25 65	193 580 112 <u>162</u>	 281 21 33	 156 15 25	250 58 69	 94 18 35	14 290 99 303	 26 3 45	43 9 56	1 119 96 23	245 55 78 46	 127 22 80	 49 52	143 210 230 129	4 251 <u>146</u> <u>280</u>	 157 36 10	6 101 57	1045 105 54 85	 <u>13</u> 1
Gouse Finch Pine Siskin American Goldfinch Red Crossbill White-winged Crossbill	10 218 21	6 549 42 2	25* 59 119 <u>11</u> *	2* 34 288	2* 8 207	38 94	210	 210 	6 376	32 66 	 10	1 152	 13	53 1 58	2 2	 11 	4 23	15 25 	 37	 2 	16 7 54	22 258 2	4 9	43	9 62	
Rufous-sided Towhee Ipswich Sparrow Savannah Sparrow Henslow's Sparrow Sharp-tailed Sparrow	94 6 124 21	78 11 264 <u>113</u>	134 81 <u>1</u> * 17	228 21 673 	77 86 	64 4 	199 2 	12 5 	10 		···· ···· ···	7 <u>24</u> 	6 	15 	2 	···· ····	3 	···· ····	1 	2	5 	15 	2 	18 	13 	
Seaside Sparrow Vesper Sparrow Slate-colored Junco Dregon Junco Iree Sparrow	15 217 <u>1</u> *	92 20 158 	7 1 504 	2 2 396 	3 558 	381 2	1 635	 550 	 769 	235 69	 197 	22* 221	 86 	359 	85	 131 6	418 5	···· 111 ····	 217 	 105 	385 	406	2* 63 	35 	109	238
Chipping Sparrow Field Sparrow Harris' Sparrow White-crowned Sparrow White-throated Sparrow	128 1 886	10 294 4 2747	9 144 395	59 225 1 976	4 125 809	36 213	1* 61 748	81 620	96 699	177 2 308	90 59 174	39 15 310	2 19 80	54 9 308		7 36 20	59 37 38	4 17 16	48 18 56	13 76	1* 36 26 166	94 89 195	32 2 21	30 70 94	58 <u>1</u> * 75 34	11
fox Sparrow Lincoln's Sparrow Swamp Sparrow Song Sparrow Lapland Longspur	8 <u>1</u> * 300 432	146 2 534 876 1	115 195	13 <u>2</u> * 939 935	7 98 324	1 34 89	6 35 102	 14 180	 16 213	 38 348	 3 131	 48 168	 13	8 10 68	 4	3 21	 21	 17	1 44	 10	7 76	1 1 209	1 <u>1</u> 84	 1 106	1 65	89
Snow Bunting	202	185		23																	••••	•••				
lotal Species	161	181	139	158	107	103	90	89	92	68	56	59	40	66	29	53	48	53	55	29	69	79	64	60	67	6
fotal Individuals	75,939	94,050	5,030,204	104,789	28,565	12,141	21,544	9621	13,239	4218	2538	3950	1266	5591	409	4036	9308	8231	2975	470	7754	9029	4088	4741	31,678	203
otal Party-hours	140	150	89	108	69	85	51	87	107	47	30	40	18	72	21	31	33	36	23	13	65	94	51	30	62	5

the only heron west of the Blue Ridge, and it was found on eight of the counts in that area.

Back Bay reported interesting totals of 29,000 Snow Geese and 6300 Gadwalls, but the high numbers of American Widgeon here in recent years were not repeated. Other high totals included 3421 Bufflehead at Cape Charles and 631 Common Mergansers at Fort Belvoir. Two Harlequin Ducks at Little Creek were a first for a Virginia count, and single Common Eiders were found at Cape Charles and Little Creek. A Canvasback in Wise County seemed out of place, and at Tazewell 4 Ruddy Ducks and a Hooded Merganser were unusual. The most unusual hawk reported was a Goshawk at Brooke, the first reported for a state count in over 10 years. Ninety-six Black Vultures at Blacksburg were excellent, and other abnormally high counts were 22 Sharp-shinned Hawks at Cape Charles, 30 Red-tails in Augusta County, and 12 Red-shouldered Hawks at Fort Belvoir.

Two Ruffed Grouse at Cape Charles were so far out of range and habitat that they were almost surely birds released by a local landowner. Virginia Rail totals of 35 at Cape Charles and 32 at Back Bay were both excellent. For the first time Sora were found on all four of the coastal counts, and one was also noted inland at Fort Belvoir. A Black Rail at Back Bay appears to be only the fourth record for a state count. Cape Charles recorded a number of record totals for shorebirds, including 334 American Oystercatchers, 858 Black-bellied Plovers, 123 Willets, and 63 Marbled Godwits. Other outstanding records included 157 Killdeer and 58 Common Snipe at Blacksburg, 23 Killdeer at Wise, 16 Dunlin inland at Fort Belvoir, and 13 Short-billed Dowitchers (plus 11 unidentified dowitchers) and an American Avocet at Chincoteague, the last the third record for a Virginia Christmas count. Hopewell as usual had the only inland report for Least Sandpipers, an isolated wintering population that has been found here for several years.

A Pomarine and an unidentified jaeger were found at Back Bay, the former a first for a Virginia count. Gulls of three species were seen on four western Virginia counts, the most unusual being 2 Bonaparte's Gulls at Waynesboro. Since Hopewell had a record count of 45 on the same day, 16 December, and this was the day following passage of a severe cold front, it seems reasonable to assume that these birds were the result of a late overland migratory flight. (In Christmas counts submitted to *American Birds*, similar large inland flocks were reported the same day at Washington, D. C., Accokeek, Md., and Glenolden, Pa.) A Little Gull at Chincoteague was only the third report for a state Christmas count, as was a Black-legged Kittiwake at Little Creek. Other abnormal records included 2 Laughing Gulls and a Forster's Tern inland at Hopewell and a Common Tern at Newport News.

Two Monk Parakeets were found at Mathews, a first record for a Virginia Christmas count as well as a first appearance in this journal. Barn Owls, regularly recorded on state Christmas counts only at Cape Charles, were found on five counts this year, no doubt due mainly to more intensive searching. Other owls were in moderate numbers, and Long-eared and Saw-whet Owls were missed this year. A total of 560 Fish Crows in Augusta County is further evidence that this species winters in some numbers in the Great Valley. For the second successive year Red-breasted Nuthatches increased with 167 reported on 18 counts. Cape Charles had the peak count of 46, but a locally amazing count of 30 was reported from Darlington Heights.

THE RAVEN

House Wrens were down from last year on the Eastern Shore, but a record 64 were found at Back Bay, and west of the Blue Ridge singles were reported (one without details) at Roanoke and Blacksburg. Charlottesville reported a Long-billed Marsh Wren, a rare bird for the upper Piedmont in winter, and two normally transient thrushes were seen at opposite ends of the state, a Swainson's Thursh at Chincoteague and a Gray-cheeked Thrust in Wise County, the last the sixth count record for the state. Eastern Bluebird numbers were down somewhat from last year with 378 recorded on 21 counts or 24 birds per 100 party-hours. Comparable figures last year were 459 on 24 counts or 30 birds per 100 party-hours. The Blue-gray Gnatcatcher at Back Bay was the sixth Virginia Christmas count record. Thirty-two Water Pipits were recorded at Darlington Heights and 8 at Tazewell, both unusual since this bird is rarely recorded in winter west of the Coastal Plain.

A White-eyed Vireo at Cape Charles and 2 at Back Bay were the second and third records for a state count, whereas the single Solitary Vireos seen at Little Creek and Back Bay were the third and fourth state count records. The previous Solitary Vireos were found in 1959 and 1960. Many unusual warblers were found this year. Back Bay reported a Black-and-white Warbler, and 2 Nash-ville Warblers were noted at Cape Charles and one at Back Bay, the first count records in over 20 years. A Magnolia Warbler at Blacksburg was a new addition to the cumulative list, and the Blackpoll Warbler at Roanoke was only a second count record. Prairie Warblers were found at both Chincoteague and Cape Charles, the third and fourth count records, and Cape Charles also reported an Ovenbird, the third record for a Virginia Christmas count. A Yellow-breasted Chat at Fort Belvoir was unusual away from the coast.

Cape Charles had a Yellow-headed Blackbird, a third Virginia count record, and Brewer's Blackbirds were found at Cape Charles and Back Bay. First recorded on a Virginia Christmas count in 1954, this bird is now recorded on a state count almost every other year. A Western Tanager at Back Bay added a new species to the cumulative list. Evening Grosbeaks again set an all-time record with 1946 birds recorded on 24 counts. As compared to last year, they were much less common on the Eastern Shore but generally more abundant elsewhere. Purple Finches were also in impressive numbers, and the 1950 birds seen on all 26 counts were probably a record. Pine Siskins, however, were in considerably fewer numbers than last year, with only 192 recorded on 14 counts versus 832 on 15 counts last year. As for the other northern finches, Red Crossbills were found on four counts and White-winged Crossbills only at Cape Charles.

The House Finch again scored a gain, and its total of 185 on 11 counts was another all-time record for the state Christmas counts. While the birds seem well distributed across the state, concentrations are appearing mainly in westcentral Virginia near the mountains. The record total of 53 at Lynchburg was impressive. At Little Creek, a Henslow's Sparrow was the third record for a Virginia Christmas count, and the totals of 113 Sharp-tailed Sparrows and 92 Seaside Sparrows at Cape Charles were excellent. Chincoteague reported an Oregon Junco, a fourth state count record, and Bristol a Harris' Sparrow, a new bird for the cumulative list. Another Harris' Sparrow was reported at Tazewell during the count period but not on the count day.

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Dec. 28; 6 a.m. to 6 p.m. Clear; temp. 29° to 45°; wind WNW, 2-10 m.p.h.; ground bare, water open. Forty-five observers in 16 parties. Total party-hours, 140 (115 on foot, 20 by car, 5 by boat); total party-miles, 283 (88 on foot, 172 by car, 23 by boat). Observers: David Abbott, Jackson Abbott, Robert Ake, Harry Armistead, Ruth Beck, Micou Browne, Mitchell Byrd, John Cacciapaglia, William Del Grande, Paul DuMont, Philip DuMont, David Gamache, Malcolm Garner, Harriet Gilbert, Robert Goodell, Jack Hailman, Howard Langridge, Mark Larson, Edmund LeGrand, Will McDowell, Dwight Peake, Richard Peake, John Probst, Lewis Pyle, Peter Pyle, Robert Pyle, Chandler Robbins, George Robbins, Grace Russell, William Russell, Frederic Scott (compiler), Napier Shelton, Charles Silvia, Thomas Silvia, Philip Stoddard, Ruth Strosnider, Susan Sturm, Paul Sykes, Jr., Marion and Ray Teele, John Terborgh, Charles Vaughn, Jerry Via, Claudia Wilds, Bill Williams. Seen in area count period but not on count day: Cooper's Hawk. The Cattle Egret was seen well in flight by Chandler Robbins, and the Blue-winged Teal, 2 males and a female, were observed by Armistead. The pheasants were heard calling by George Robbins and not seen and could possibly have been Japanese Green Pheasants as well as Ring-necked Pheasants. The Soras, a first for this count, were heard calling in different places by Sykes, Richard Peake, and others. The 24 dowitchers were reported by four different parties, but only 13 could be definitely assigned as to species. Cacciapaglia and Larson reported the largest group of 17. Vaughn and McDowell saw the Marbled Godwit, and the avocet was found by Ake. The Little Gull, a first count record, was observed by Jackson Abbott and Armistead, who described it as a typical winter adult. The Teeles found both the Swainson's Thrush and the Oregon Junco, and the Prairie Warbler was seen by Byrd, Sturm, and Via. Gilbert discovered the Baltimore Oriole, a first count record, and Richard Peake saw the Lincoln's Sparrow. Detailed written descriptions were submitted for all unusual observations except the godwit, which was adequately described orally.

2. CAPE CHARLES (all points within a 15-mile diameter, center 1.5 miles SE of Capeville P. O. at south end of Dunton Cove, area as described in 1972) .- Dec. 27; 4:30 a.m. to 6 p.m. Fair; temp. 40° to 60°; wind NW, 5-30 m.p.h.; no snow or ice. Fifty-three observers in 15 parties. Total party-hours, 150 (125 on foot, 19 by car. 6 by boat); total party-miles, 411 (112 on foot, 264 by car, 35 by boat). Observers: David Abbott, Jackson Abbott, Bob Ake, Henry Armistead (cocompiler), Ruth Beck, Elizabeth and Hugh Bell, Mike Browne, Mitchell Byrd, Doug Davis, Dwight Davis, Bill Del Grande, Paul DuMont, Philip DuMont, David Gamache, Harriet Gilbert, Gilbert Grant, David Green, Jon Higman, Dennis Holland, Betty Lancaster, Howard Langridge, Ed LeGrand, Harry LeGrand, Merrill Lynch, Will McDowell, Dorothy Mitchell, Harold Morrin, Ted Parker, Dwight Peake, Richard Peake, John Probst. Bob, Lewis, and Peter Pyle, Grace Russell, William Russell (cocompiler), Fred Scott, Napier Shelton, Dorothy Silsby, Frank Smith, Ruth Strosnider, Susan Sturm, Paul Sykes, Marion and Ray Teele, John Terborgh, Jerry Via, Claudia Wilds, Bill Williams, Gary Williamson, Eric and Jan Witmer. The immature Great Cormorant was well observed both at rest and in flight by Armistead and Wilds, and Richard Peake saw the apparently immature Common Eider. The Ruffed Grouse were reported by Strosnider. Since the Commission of Game and Inland Fisheries disclaims any introductions in this area, it is felt these must have been released by some local landowner. The Willets were reported by four parties, including 115 by Armistead, Terborgh, and others. The previous high for this bird on this count was 69. Armistead et al. also observed the single flock of 63 Marbled Godwits. The White-eyed Vireo was seen by Jackson Abbott, and one Nashville Warbler each was seen separately by David Abbott and Napier Shelton. Lynch saw both Prairie Warblers and Harry LeGrand observed one of the same birds, while the Ovenbird was noted by Paul DuMont. The Yellow-headed Blackbird was an adult male and was reported by William Russell, and the female Brewer's Blackbird was observed by Sykes. Paul DuMont saw the 2 female White-winged Crossbills, the Lapland Longspur, and one of the Lincoln's Sparrows, the other being seen by Richard Peake. Detailed written descriptions were submitted for all unusual observations.

3. LITTLE CREEK (all points within a 15-mile diameter, center 3.8 miles NE of Kempsville in Virginia Beach, area as described 1971).-Dec. 31; 6 a.m. to 5 p.m. Cloudy, rain commencing at 9 a.m. and continuing all day; temp. 58° to 68°; wind SE-S, 8-17 m.p.h.; ground clear, water open. Twenty-three observers in 9 parties. Total party-hours, 89 (69 on foot, 20 by car); total party-miles, 317 (35 on foot, 282 by car). Observers: Robert Ake, Elizabeth Bell, Hugh Bell, Floy Burford, Wavell Fogleman, Gilbert Grant, Gisela Grimm, Virginia Hank, Mary Horne, David Hughes, Betty Lancaster, Howard Langridge, Emily Moore, Dwight Peake, Richard Peake, Frank Richardson, W. F. Rountrey, Dorothy Silsby, Paul Sykes, Jr. (compiler), Dorothy Tripician, Robert Tripician, Claudia Wilds, Gary Williamson (Cape Henry Bird Club and guests). Seen in area count period but not on count day: Great Cormorant, Pigeon Hawk. The Great Cormorant, an immature, was observed both flying and perched at the Chesapeake Bay Bridge-Tunnel island No. 1 on Dec. 28 by Browne, Langridge, and Sykes. Langridge and Sykes also saw the male and female Harlequin Ducks and the immature male Common Eider. The Black-legged Kittiwake was an adult found with some Ring-billed Gulls by Ake and Fogleman, and Fogleman also reported the Solitary Vireo. The Baltimore Orioles were single birds at feeding stations seen by two different parties, and the House Finches and Red Crossbills were each observed by three parties. Richard Peake found the Henslow's Sparrow, while the Lapland Longspur was reported by Burford, Grimm, Hank, and Moore. Detailed written descriptions were submitted for all the above observations.

4. BACK BAY NATIONAL WILDLIFE REFUGE (all points within a 15-mile diameter, center 1.5 miles E of Back Bay, area as described in 1971).-Dec. 29; 5:30 a.m. to 5:30 p.m. Partly cloudy; temp. 31° to 55°; wind NE, 6-15 m.p.h.; ground clear, water open. Thirty-one observers in 11 parties. Total party-hours, 108 (84 on foot, 17 by car, 2 by plane, 5 by boat); total party-miles, 507 (65 on foot, 264 by car, 150 by plane, 28 by boat). Observers: Robert Ake, Robert Anderson, Henry Armistead, Baniel Benfield, Carvel Blair, Mike Browne, Floy Burford, Jay Carter, Douglas Davis, Wavell Fogleman, Gilbert Grant, Gisela Grimm, Virginia Hank, Dennis Holland, Howard Langridge, Edmund LeGrand, Harry LeGrand, Merrill Lynch, Emily Moore, Harold Olson, Dwight Peake, Richard Peake, Jr., Frank Richardson, W. F. Rountrey, William Russell, Frank Smith, Paul Sykes, Jr. (compiler), Romie Waterfield, Vee Weggel, Claudia Wilds, Gary Williamson (Cape Henry Bird Club and guests). The Green Heron was seen by Burford and the Cattle Egrets by Anderson and Grant. The Peakes found both the Rough-legged Hawk and the Black Rail, the latter flying across a road no more than 10 feet from the observers. Sykes observed the Pomarine Jaeger, while the unidentified jaeger was noted by Carter. The Blue-gray Gnatcatcher was seen by Richardson and Rountrey, one White-eyed Vireo by Anderson and Grant, and the other White-eve by the Peakes. Ake found the Solitary Vireo, while Burford reported the Black-and-white Warbler and the Peakes the Nashville Warbler. The Brewer's Blackbirds, 7 males and 4 females, were observed by Fogleman and Russell, and Armistead and Browne found the male Western Tanager on Long Island in Back Bay. Grimm and Wilds saw the 3 female House Finches, and the Lincoln's Sparrows were noted separately by Fogleman and Russell and by the Peakes. Detailed written descriptions were submitted for all of the unusual observations.

5. NEWPORT NEWS (all points within a 15-mile diameter, bounded by Chesapeake Bay, Hampton Roads, James River, Grafton; area as described in 1972).—Dec. 30; 7 a.m. to 4:10 p.m. Cloudy; temp. 45° to 55°; wind S, 5-10 m.p.h.; ground bare, water open. Twenty-five observers in 9 parties. Total party-hours, 69 (52 on foot, 17 by car); total party-miles, 284 (36 on foot, 248 by car). Observers: Ruth Beck, Elizabeth Bell, Hugh Bell, Mitchell Byrd, Charles Hacker, Stalma Hacker, S. Hall, B. Heimerl, G. Heimerl, Jose Hernandez, J. Hotchkiss, T. Hotchkiss, G. Keefe, Betty Lancaster, J. Lewis, Dorothy Mitchell, Sydney Mitchell, A. Rawls, M. Rawls, Dorothy Silsby, Doris Smith, Walter Smith (compiler), Susan Sturm, Jerry Via, Bill Williams. The Peregrine Falcon was seen by the Smiths, the Common Tern and the Tree Sparrow by Hernandez, and the House Finches by Dorothy Mitchell and Walter Smith.

6. MATHEWS (all points within a 15-mile diameter, center 0.5 mile E of Beaverlett P. O., area as described 1972).—Dec. 30; 6:30 a.m. to 5 p.m. Cloudy with scattered showers; temp. 46° to 59°; wind SE, 0-9 m.p.h.; ground clear, water open. Twenty-five observers in 10 parties. Total party-hours, 85 (45 on foot, 30 by car, 10 by boat); total party-miles, 343 (41 on foot, 281 by car, 21 by boat). Observers: Pat Carey, C. R. Diggs, Jim Eike, Peggy Gill, Brent Heath, Mrs. E. N. Hudgins, Clare Jones, James Link, Virginia Maguigan, Fred Maxwell, Grace Nauman, Maynard Nichols, Mary Pulley, Elinore Respess, Betty, Stephen, and David Roszell (compiler), Polly Strother, Helen Walker, Gerald, Lorna, Marvin, and Teresa Wass, Jim Watson, Henrietta Weidenfeld. Seen in area count period but not on count day: Common Scoter, American Coot, Bonaparte's Gull, Yellow-breasted Chat. The Yellow-crowned Night Herons were found by two parties, one by Heath and Watson and the other by Jones. The Monk Parakeets were seen by Nauman and Respess on Gwynn's Island where they had been noted by many observers since October.

7. HOPEWELL (all points within a 15-mile diameter, center in Curles Neck, area as described 1972).—Dec. 16; 6 a.m. to 5 p.m. Mostly clear; temp. 30° to 40°; wind NW, 10-30 m.p.h.; ground clear but saturated, water open. Ten observers in 5 parties. Total party-hours, 51 (40 on foot, 8 by car, 3 by boat); total party-miles, 231 (30 on foot, 189 by car, 12 by boat). Observers: Wavell Fogleman, Robert Olsen, Robert Pacific, Betty and David Roszell, Frederic Scott (compiler), William Slate, II, Warren Smith, David Sonneborn, Henrietta Weidenfeld. The Laughing Gulls were seen by David Roszell and Pacific, and both the high count of Bonaparte's Gulls and the Forster's Tern were reported by Olsen and Sonneborn. Scott and Slate observed the Chipping Sparrow.

8. BROOKE (all points within a 15-mile diameter, center on road 3 miles ESE of Brooke, area as described 1972).—Dec. 18; 5:45 a.m. to 5:45 p.m. Cloudy; temp. 10° to 43° ; wind SSW, 10-15 m.p.h.; ground bare, Potomac with shore ice, tidal bays and marshes largely frozen. Fifteen observers in 11 parties. Total party-hours, 87 (74 on foot, 13 by car); total party-miles, 146 (40 on foot, 106 by car). Observers: Roy Bailey, A. A. Baker, Henry Bell, III, Clark Blake, L. D. Bonham, J. H. Eric, R. G. Luedke, E. T. McKnight (compiler), T. B. Nolan, J. C. Reed, R. L. Smith, D. B. Stewart, A. M. White, D. R. Wiesnet, D. R. Wones. The Goshawk was seen twice in flight by Blake and Nolan who noted all field marks except the eye stripe, and the House Wren was observed by Bell.

9. FORT BELVOIR (all points within a 15-mile diameter, center on Pohick Church, area as described 1972).—Dec. 23; 6 a.m. to 5 p.m. Overcast, light drizzle; temp. 40° to 48°; wind W, 0-10 m.p.h.; ground bare, water open. Thirty-four observers in 15 parties. Total party-hours, 107 (89 on foot, 16 by car, 2 by boat); total party-miles, 249 (69 on foot, 178 by car, 2 by boat). Observers: David Abbott, Jackson Abbott (compiler), Bonnie Bowen, Ed Buckler, Dorothy Cristensen, Alice and Paris Coleman, W. Cramer, Charles Cremeans, W. Del Grande, Bruce and Edward Dillon, Paul and Philip DuMont, Harriet Gilbert, Daniel Guthrie, Dan Keeney, Malcolm Klein, Robert Lamberton, Elizabeth and George Lakata, Stephen McArthur, Will McDowell, Elizabeth Mount, Robert Pyle, Napier Shelton, George Sigel, Edgar Smith, Marion and Ray Teele, Leonard Teuber, George Weickhardt, Claudia Wilds, James Zook. Seen in area count period but not on count day: Horned Lark. The Sora was flushed by Cremeans and Del Grande, and the Dunlins and Yellow-breasted Chat were reported by the DuMonts. All three of these species were firsts for this count.

10. CHARLOTTESVILLE (all points within a 15-mile diameter, center near Ivy as in previous years, area as described 1972).—Dec. 30; 6:45 a.m. to 5:15 p.m. Cloudy, rain a.m.; temp. 37° to 48°; no wind; ground bare, water open. Eight observers in

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6 parties. Total party-hours, 47 (40 on foot, 5 by car, 2 by canoe); total party-miles, 218 (46 on foot, 169 by car, 3 by canoe). Observers: Alison Davenport, Bruce and Pring Davenport, Kenneth Lawless, Robert Merkel, Katherine Michie, Eileen Stephens, Charles Stevens (compiler). The Long-billed Marsh Wren was found by Stephens and the Savannah Sparrows by Stevens.

11. WARREN (all points within a 15-mile diameter, center near Keene, area as described 1972).—Dec. 31; 7 a.m. to 4 p.m. Rain with some fog; temp. 39° to 59°; no wind; ground bare, water open. Seven observers in 4 parties. Total party-hours, 30 (26 on foot, 4 by car); total party-miles, 151 (33 on foot, 118 by car). Observers: Dr. and Mrs. C. R. Barton, Jr., Kenneth Lawless, Eileen Stephens, Charles Stevens (compiler), Fred and Lina Whiteside. The Blue-winged Teal was seen by both Stephens and Stevens.

12. DARLINGTON HEIGHTS (all points within a 15-mile diameter, center Darlington Heights P. O.).—Dec. 30; 7:30 a.m. to 5 p.m. Cloudy; temp. 37° to 54°; wind NW, 0-5 m.p.h.; ground bare but wet, water open. Eighteen observers in 5 parties (1 at feeder). Total party-hours, 40 (32 on foot, 6 by car, 2 at feeder); total party-miles, 120 (23 on foot, 97 by car). Observers: Jeanette Boone, Vera Copple (compiler), John and Thelma Dalmas, Bill Dickensen, Edith and Hall Driskill, Keith Fielder, Ida Harvey, Barbara Harvil, Paul McQuarry, Gene Moore, Myriam Moore, Phyllis and Wyatt Murphy, Gertrude Prior, Mattie Scruggs, Margaret Watson. The Water Pipits were identified by McQuarry first and later seen by most of the observers, and the Vesper Sparrows were found by Gene Moore and Phyllis Murphy.

13. SWEET BRIAR (all points within a 3-mile diameter, center Sweet Briar College).—Dec. 28; 7:30 a.m. to 4:30 p.m. Clear; temp. 36° to 56°; no wind; ground bare, water open. Ten observers in 3 parties. Total party-hours, 18 (17.5 on foot, 0.5 by car); total party-miles, 16 (12 on foot, 4 by car). Observers: Florence Bennett, Mary Blackwell, Ernest Edwards, Mabel Edwards, Kay Macdonald, Gene Moore, Myriam Moore, Phyllis Murphy, Wyatt Murphy, Gertrude Prior (compiler).

14. LYNCHBURG (all points within a 15-mile diameter, center Lynchburg College, area as described 1972).—Dec. 16; 7 a.m. to 5:30 p.m. Partly cloudy; temp. 19° to 39°; wind NW, 24-30 m.p.h.; ground frozen a.m., no snow. Thirty-nine observers in 10 parties (plus 6 at feeders). Total party-hours, 72 (60 on foot, 12 by car); total party-miles, 205 (54 on foot, 151 by car). Observers: Laura Anthony, Frances Applegate, Mark Bonds, John Cacciapaglia, James Carter, Elizabeth Caskey, Mary Coffey, Vera Copple, John and Thelma Dalmas, Audree Dodd, Porter Echols, Keith Fielder, Frank and Jo Hanenkrat, Frankie Harris, Roger Hill, Kay Macdonald, Brian Maddox, Paul McQuarry, Gene Moore, Myriam Moore (compiler), Phyllis and Wyatt Murphy, Betty Padley, Gertrude Prior, Lily Reams, Conrad Richardson, Joan and Richard Ricketts, Rosalie Rosser, Hans Seyffert, Robert Shirey, Lorene Thomas, M. B. Tillotson, Mary Walker, Margaret Watson, Dorothy Wilson, Grace Wiltshire. Seen in area count period but not on count day: Black Duck, Green-winged Teal.

15. BIG FLAT MOUNTAIN (all points within a 15-mile diameter, center on Pasture Fence Mountain and mostly in southern Shenandoah National Park, area as described 1972).—Dec. 28; 6:45 a.m. to 5:45 p.m. Clear; temp. 25° to 45°; wind W, 0-15 m.p.h.; ground bare, water open. Three observers in 2 parties. Total party-hours, 21 (19 on foot, 2 by car); total party-miles, 50 (30 on foot, 20 by car). Observers: David Merkel, Robert Merkel, Charles Stevens (compiler).

16. ROCKINGHAM COUNTY (all points within a 15-mile diameter, center at Ottobine, area as described 1972).—Dec. 16; 7 a.m. to 5 p.m. Partly cloudy; temp. 22° to 16°; wind NW, 15-25 m.p.h.; ground bare, water open. Eleven observers in 5 parties. Total party-hours, 31 (9 on foot, 22 by car); total party-miles, 333 (13 on foot, 320 by car). Observers: Stephanie Bortner, Robert Burns, John Carpenter, Larry Carpenter, Max Carpenter (compiler), Greg Coffman, Doug Coleman, Hollen Helbert,

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Harry Jopson, Ricki Li, Lee Norford. Seen in area count period but not on count day: Brown Creeper.

17. AUGUSTA COUNTY (all points within a 15-mile diameter, center at intersection of county roads 780 and 781, to include Brand's Flat, Fort Defiance, Frank's Mill, Mt. Horeb, Mt. Sidney, New Hope, Quick's Mill, Spring Hill, Staunton, Verona; farmyards, orchards, and gardens 10%, fields and pastures 60%, swamps and ponds 5%, towns 10%, woods 15%).—Dec. 22; 8 a.m. to 5 p.m. Overcast with some rain; temp. 39° to 46°; wind SE, 0-5 m.p.h.; ground bare, water open. Seventeen observers, 15 in 5 parties and 2 at feeders. Total party-hours, 33 (8 on foot, 25 by car); total party-miles, 349 (18 on foot, 331 by car). Observers: John Cacciapaglia, Rick Chittum, Denise Day, James Gum, Betty Harman, Gary Hart, Mozelle Henkel, Kurt Kehr, Rolf Wehr, Josephine King, YuLee Larner, John Mehner (compiler), Arthur Mizzi, Isabel Obenschain, Roseanne Robertson, Ruth Snyder, Elizabeth Taylor. Seen in area count period but not on count day: Yellow-bellied Sapsucker, Ruby-crowned Kinglet, Robin.

18. WAYNESBORO (all points within a 15-mile diameter, center Sherando, area as described 1972).—Dec. 16; 7 a.m. to 5 p.m., 7:30 p.m. to 9 p.m. Clear; temp. 18° to 32°; wind W, gusting to 40 m.p.h.; ground bare, water open. Nine observers, 8 in 5 parties plus 1 at feeder. Total party-hours, 36 (15 on foot, 21 by car); total party-miles, 258 (23 on foot, 235 by car). Observers: Bruce Davenport, James Gum, John Henkel, Mozelle Henkel, Jean Mehler, Isabel Obenschain, Brian Scruby, Ruth Snyder (compiler), Charles Stevens. Seen in area count period but not on count day: Gadwell, Pintail, Fish Crow, Red-breasted Nuthatch, Robin, Ruby-crowned Kinglet, Cedar Waxwing, Rufous-sided Towhee. The Bonaparte's Gulls were seen at a pond near the Waynesboro airport by Gum, Obenschain, and Snyder. This species was also seen here on the Christmas count 2 years previous.

19. LEXINGTON (all points within a 15-mile diameter, center Washington and Lee University, area as described 1972).—Dec. 26; 6 a.m. to 5 p.m. Overcast, with drizzle in p.m.; temp. 41° to 45°; wind NE, 0-5 m.p.h.; ground bare. Six observers in 3 parties. Total party-hours, 23 (16 on foot, 7 by car); total party-miles, 138 (29 on foot, 109 by car). Observers: Kenneth Bradford, Marguerite Moger, Robert Paxton (compiler), John Rogers, Polly Turner, Cabell Tutwiler. Seen in area count period but not on count day: Barn Owl.

20. PEAKS OF OTTER (all points within a 15-mile diameter, center Peaks of Otter Visitor Center, area as described 1972).—Dec. 28; 7:30 a.m. to 4 p.m. Clear; temp. 30° to 38°; wind SW, 15-30 m.p.h.; no snow or ice. Six observers in 2 parties. Total party-hours, 13 (10 on foot, 3 by car); total party-miles, 49 (38 on foot, 11 by car). Observers: Garst Bishop, Almon English (compiler), Keith Fielder, Ruskin Freer, Paul McQuarry, Ron Warfield. Seen in area count period but not on count day: Turkey.

21. ROANOKE (all points within a 15-mile diameter, center Wasena Bridge, area as described 1972).—Dec. 16; 7 a.m. to 4 p.m. Clear; temp. 20° to 40°; wind NW, 25-30 m.p.h. Thirty observers in 7 parties. Total party-hours, 65 (21 on foot, 44 by car); total party-miles, 359 (27 on foot, 332 by car). Observers: W. P. Arthur, Mrs. Jennings Bird, Margaret Brown, Doris Clark, Foy Clark, Mike Dowdy, Mr. and Mrs. Samuel Ellington, Mrs. Edwin Golden, Raymond Harper, Rushia Harris, Don Huffman, Michael Kelly, Perry Kendig, Barry Kenzie, Mrs. T. H. Krakauer, Aaron Lyle, Skippy Lyle, Carole Massart, Ernest Moore, Hazel Moore, Mrs. W. J. Nelson, Bill Opengari, Jane Opengari, John Pancake, Mike Purdy, Tod Stockstill, Julian Tinsley, Jr. (compiler), Mrs. Homer Waid, R. Scott Walker. Seen in area count period but not on count day: Pintail, Wood Duck, Ring-necked Duck, Common Goldeneye, Hooded Merganser, *Goshawk*, Bald Eagle, Screech Owl. The Goshawk, seen 31 Dec. by the Opengaris and Massart, will be reported separately. No details were given for the House Wren. The Blackpoll Warbler was reported by Purdy and

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Kinzie, who saw the back and breast color as well as the leg color but did not mention the presence or absence of black stripes on the back that separate it from the Pine Warbler. The Chipping Sparrow was apparently a bird in good adult plumage (observer not mentioned).

22. BLACKSBURG (all points within a 15-mile diameter, center near Linkous Store, area as described 1972).-Dec. 27; 6 a.m. to 6 p.m. Clear; temp. 27° to 40°; wind W, 0-25 m.p.h.; ground bare, water open. Thirty-one observers in 12 parties. Total party-hours, 94 (64 on foot, 30 by car); total party-miles, 395 (70 on foot, 325 by car), Observers: Jean Ambrose, Dwight Chamberlain, Chris Cochran, Don Cochran, Jim Craig, Hewlette Crawford, Charles Dachelet, Clara Dickinson, Bob and Pat Downing, Glenn Dudderar, Maynard Hale, Charles and Darelyn Handley, Dick Harlow, Baldwin Lloyd, John Lyden, Burd McGinnes, Dominick Mellace, Henry Mosby, John Murray (compiler), Curtis and Martha Roane, Pat Rutherford, Myron Shear, Joyce Simpkins, Ellison and Mary Linda Smyth, Connie Stone, David West, Clifton Wills. Seen in area count period but not on count day: Screech Owl, Great Horned Owl, Brown Thrasher. The Barn Owls were reported by two parties, one by the Handleys, Craig, and West and the other by the Roanes. The Magnolia Warbler was seen by Martha Roane who noted all the normal field marks, including the white band on the middle third of the tail, the absence of a bright yellow rump, etc. Chamberlain and Dudderar found the House Wren.

23. TAZEWELL (all points within a 15-mile diameter, center Four-way, to include Tazewell, Wittens Mill, Wittens Valley, Baptist Valley, Thompson Valley, Burkes Garden Mountain to Gose's Mill; field and farmland 40%, oak and hickory forest 50%, pine forest 1%, swamps and ponds 1%, towns 8%).-Dec. 21; 7:30 a.m. to 5:30 p.m. Rain; temp. 35° to 48°; wind SW, 3-5 m.p.h. Twenty-one observers in 6 parties and at 2 feeders. Total party-hours, 51 (13 on foot, 38 by car); total partymiles, 208 (20 on foot, 188 by car). Observers: Jack Chambers, Sarah Cromer (compiler), Fred Dean, Tony Decker, Annella Greever, Edgar Greever, Jim Hurt, Madeline Hurt, Oliver Johnson, Louise Leslie, Pearl Leslie, Mark Mullins, Helen Parris, Jack Parris, Dwight Peake, Richard Peake, Mauricio Schrader, Philip Shelton, Harold Toms, Eddie Torrence, Nancy Ward. Seen in area count period but not on count day: Common Goldeneye, Bufflehead, Cooper's Hawk, Pileated Woodpecker, Redbreasted Nuthatch, Yellowthroat, Brown-headed Cowbird, Harris' Sparrow. The Canada Goose flew well and was not a local domestic bird. The Ruddy Ducks, which had been in the area for about a week, were seen by Johnson, Mullins, and others, and Johnson also found the Hooded Merganser. The Water Pipits were observed by Cromer, Annella Greever, and Ward, while Richard Peake and others noted the Myrtle Warbler. The Yellowthroat was seen by Mullins and Toms, and the Harris' Sparrow was first found by Cromer on 29 Dec. and will be reported in detail elsewhere. The Savannah Sparrow was observed by Richard Peake, the Vesper Sparrows by Schrader and the Hurts, and the Tree Sparrows again by Richard Peake.

24. GLADE SPRING (all points within a 15-mile diameter, center at junction of rts. 750 and 609, area as described 1972).—Dec. 23; 7 a.m. to 5 p.m. Cloudy with intermittent rain; temp. 40° to 42°; wind SW, 0-5 m.p.h.; ground bare but saturated, water open. Eight observers in 4 parties. Total party-hours, 30 (14 on foot, 16 by car); total party-miles, 144 (16 on foot, 128 by car). Observers: Dorothy and Turner Clinard (compiler), Dorothy and Paul Crawford, A. M. Decker, H. W. Nunley, Jane White, Diane Wilson. Seen in area count period but not on count day: Myrtle Warbler, Pine Siskin, Evening Grosbeak. The Savannah Sparrows were noted by Paul Crawford.

25. BRISTOL (all points within a 15-mile diameter, center at junction of rts. 647 and 654, area as described 1970).—Dec. 30; 7 a.m. to 5:15 p.m. Cloudy, then clear; temp. 45° to 58°; no wind. Sixteen observers in 10 parties. Total party-hours, 62 (30 on foot, 32 by car); total party-miles, 326 (22 on foot, 304 by car.) Observers:

Judy Abbott, Rockwell Bingham (compiler), Rosemary Bingham, Wallace Coffey, Lelia Epperson, Craig Folk, Kenneth Hale, Joseph Jackson, David McPeak, Max Miller, Conrad Ottenfeld, Helen Ottenfeld, John Shaw, Charles Smith, Enno vanGelder, Diane Wilson. The Harris' Sparrow was carefully observed for about one-half hour by Coffey and Smith near the intersection of rts. 664 and 670 in Washington Co., Va. It was traveling with a small flock of White-crowned Sparrows at the time. Careful documentation was submitted with this record.

26. WISE COUNTY (all points within a 15-mile diameter, center Dorchester, area as described 1972) .- Dec. 16; 7:30 a.m. to 5:30 p.m. Partly cloudy; temp. 14° to 27°; wind SW, 10-60 m.p.h.; ground snow-covered, large bodies of water open. Sixteen observers in 7 parties. Total party-hours, 54 (23 on foot, 31 by car); total partymiles, 272 (23 on foot, 249 by car). Observers: Turner Clinard, Sarah Cromer, Fred Dean, Betty Gibson, Miriam Lantz, Gaynelle Malesky, Mark Mullins, Dwight Peake, Richard Peake (compiler), Mauricio Schrader, Philip Shelton, Rockwell Smith, Gladys Stallard, Joseph Straughan, Tommy Straughan, Hazel Thrower (Cumberland Bird Club and guests). Seen in area count period but not on count day: Sharp-shinned Hawk, Red-shouldered Hawk, Great Horned Owl, Barred Owl, Belted Kingfisher. The Red-throated Loon was observed at length several times by Clinard, Mullins, and Dwight Peake. It had been found earlier in the week by Richard Peake. Clinard, Mullins, and Dwight Peake also found the Canvasback, and the Eastern Phoebe was seen by Dean. The Catbird was seen by Stallard at her feeding station, while Schrader and Shelton observed the Gray-cheeked Thrush at some length. The Brown-headed Cowbird, a first winter record for the county, was found by Dean and Richard Peake.

115 Kennondale Lane, Richmond, Virginia 23226

THIRD NESTING RECORD OF THE SHORT-EARED OWL FOR VIRGINIA

WILLIAM S. CLARK

On 5 May 1972 Ted Swem and I found the nest of a Short-eared Owl, *Asio flammeus*, within the boundaries of Dulles International Airport, Loudoun County, Virginia.

The nest was located approximately 70 yards from one of the runways in a wet field of short grasses. One of the adults, presumably the female, was brooding the young when the nest was found. She allowed us to approach within 20 feet and to observe her for 10 minutes (Figure 1). She flushed only when we approached nearer. The nest contained 4 chicks probably 3 to 5 days old. Their eyes were open and they were capable of a weak *cheep* but could not walk. The remains of two meadow voles, *Microtus pennsylvanicus*, were on the rim of the nest, which was slightly over a foot in diameter. The field supported a large population of these rodents. The adult bird flew around the nest at an altitude of over 100 feet but did not call or give a "wounded bird" display as described in Bent (1961, p. 172).

We returned on 19 May 1972 to band the young and found the nest empty. (On our previous visit we had taken pains to approach and leave the nest using a single path which we liberally sprayed with Dog Away, an animal repellent.) Bent (*op. cit.*) states that the young are capable of leaving the nest at about 2 weeks of age and are very adept at hiding in the nearby grass. We searched



FIGURE. 1. Short-eared Owl at nest, Dulles Airport, 5 May 1972. Photo by W. S. Clark.

the adjacent area for over an hour and could not locate the young or the adults. We feel that the young had left the nest under natural conditions, but the possibility of predation exists.

The Short-eared Owl is a common winter resident at the airport, with 20 or 30 occurring every year. This is a local situation as the bird is far more common here in winter than in any other locality in Virginia. This is, in fact, the only locality in Virginia away from the coastal marshes where this bird can be seen in winter with any degree of regularity.

The two previous Virginia breeding records are given by Bailey (1913), who states that it nests in the marshes of the Eastern Short but does not give details on localities and clutch sizes of specific nests, and by Robbins (1950) who reported on a nest found by Alva G. Nye, Jr., with 4 eggs on 17 April 1950 near Leesburg, Loudoun County, approximately 10 to 15 miles from this new nest.

The A.O.U. *Check-List* (1957) gives the southern extent of the breeding range of this species as southern Ohio, northwestern New York, New Jersey (Cape May), and Virginia (Tidewater areas).

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7800 Dassett Court, Apt. 101, Annandale, Virginia 22003

IN MEMORIAM: PAUL SUMMERS DULANEY

The untimely death, on 5 November 1972, of Paul Summers Dulaney has robbed the VSO of a long-time member, a former president, and a powerful spokesman on environmental issues. He was only 58.

Paul Dulaney was born in Washington, D.C., on 29 November 1913. He received the degree of Bachelor of Science in Architecture from the University of Virginia in 1935 and continued his training with a Master's degree in city planning from the Massachusetts Institute of Technology. During the Second World War he served in the U.S. Navy, rising to the rank of Lieutenant Commander.

After the war Mr. Dulaney practiced his profession as planning director of the Knoxville Housing Authority and as executive director of the Winston-Salem Redevelopment Commission. In 1958 he returned to the University of Virginia's School of Architecture where he chaired the division of city planning until his death. He was elected a full professor in 1971. During the academic year of 1970-71 he held an appointment as one of the University's Sesquicentennial Associates of the Center for Advanced Studies.

Mr. Dulaney served as a planning consultant for the cities of Portsmouth, South Boston, Culpeper, Bedford, Covington, and Richmond. He undertook an architectural survey for the Historic Savannah Foundation, and he published a guidebook entitled *The Architecture of Richmond*. In 1969 he received the Virginia Citizens Planning Association award for outstanding contributions to planning in the Commonwealth of Virginia.

Paul Dulaney was a member of the VSO for 18 years, having joined the Society in the autumn of 1954. He was elected Vice President in 1957 and President in 1960, serving in each office for a period of 3 years. Throughout his career, his deep concern for environmental values was the mainspring of his actions. It was natural, therefore, that he should represent the VSO, first as a delegate to the Virginia Wildlife Federation, and later as a director of the Conservation Council. It was during this period that he directed the study of scenic rivers for the Virginia Commission of Outdoor Recreation. In all his contacts, Paul Dulaney was recognized as a voice of reason, the advocate of rational planning, of wise land use, and of conservation of natural values.

J. J. MURRAY, JR.

BACK BAY FIELD TRIP

M. A. Byrd

The annual VSO field trip to Back Bay National Wildlife Refuge was held on 2 December 1972 with 65 members in attendance. The trip was characterized by bright sunny weather and extremely moderate temperature for the season.

The Back Bay Refuge currently in is the process of expanding its public information program, and members enjoyed the new exhibits of mounted birds as well as other materials.

Small groups departed from Refuge headquarters and followed various routes along the beach and dikes. Although most of the usual species of waterfowl were present, it was immediately obvious that most were present in considerably reduced numbers from those of previous years. Refuge personnel, in fact, estimated that ducks were present at about 30% of the numbers seen on the 1971 trip. It was particularly evident that immature birds were nearly absent from flocks of Snow Geese and Whistling Swans, a fact usually related to a very poor breeding season. Such an interpretation would be consistent with reports on poor breeding success of these species previously issued by the U.S. Fish and Wildlife Service.

One impressive feature of the trip was the spectacular display of large numbers of Gannets in various plumage types. These birds were fishing within good view of shore despite a strong offshore wind. Consistent with this was the sighting of 12 Black-legged Kittiwakes and a Parasitic Jaeger along the beach at the south end of the Refuge by a party consisting of Mitchell Byrd, Ruth Beck, Jerry Via, Lou Bjostad, Dorothy Mills, Jennifer Shopland, Susan Sturm, Dwight Davis, and John Pancake.

All of the kittiwakes were in adult plumage with one exception, an immature bird.

At midafternoon, a small group was alerted at Refuge headquarters by telephone of the sighting of a Scissor-tailed Flycatcher south of the Refuge by W. W. Fogelman. Unfortunately, the bird had departed the area when the group arrived. This sighting constitutes one of the very few records of this species for the state and will be reported in a separate note.

A roost of 37 adult Black-crowned Night Herons provided a spectacular sight early in the day. The total for the day was 97 species.

On Sunday, 3 December, a number of members continued to the Craney Island Disposal Area. The character of this area has changed substantially during the past year as a result of the deposition of more spoil material, resulting in less open water and fewer accessible mud flats. Waterfowl were present in lesser numbers than in previous years. Of particular interest was a flock of 10 Black Skimmers and single American Avocet. Several flocks of Snow Buntings were observed, including one of 37 individuals.

The trip terminated at noon following one and a one half days of good birding, good companionship, and superlative weather.

Department of Biology College of William and Mary Williamsburg, Virginia 23185 **MARCH 1973**

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NEWS AND NOTES

COMPILED BY F. R. SCOTT

FRIGATEBIRD IN VIRGINIA. A Magnificent Frigatebird, *Fregata magnificens* Mathews, was observed and photographed on 14 July 1972 near Hog Island, Northampton County, Virginia, by Arthur H. Thompson and Thomas J. Aylward of College Park, Maryland. Identification was confirmed from a color slide sent to Chandler S. Robbins. A copy of this photograph has been placed in the National Photoduplicate File, Accession No. 128-1B. The Editor also has a black-and-white print made from the color slide. This is the first confirmed record of this bird for Virginia.

MORE ON SHORT-EARED OWLS. In connection with the note on the Short-eared Owl nest in this issue, Alva G. Nye, Jr., was contacted to confirm the details of a nest found by him on 17 April 1950. In a letter to the Editor, Mr. Nye wrote: "The Short-eared Owl's nest near Leesburg, Virginia, held 4 eggs. A friend of mine, Mr. Stephen Gatti of Germantown, Md., has a photograph of the nest and eggs. During the winter of 1949, there was an abundance of these owls in a huge field to the north and just outside of Leesburg. Wheat had been grown in the field, and *Microtus* were everywhere. We estimated there were between 50 and 100 owls there. We used to exercise our trained Peregrine Falcons in that general area. Occasionally, if an owl happened to be on the wing, the Peregrine and owl became involved in spectacular aerial maneuvers."

SAW-WHET OWL IN POWHATAN. According to Charles R. Blem, a road-killed Saw-whet Owl was picked up in Powhatan County on 15 November 1971. The skin is now in the collection of Virginia Commonwealth University.

WHITE-WINGED CROSSBILLS AGAIN IN WINTER. There were several reports of White-winged Crossbills in Virginia during early 1972 following the two Christmas bird count reports in late December 1971 (*Raven*, 43: 11, 1972). In northern Virginia, 3 were reported off and on at Arlington National Cemetery up to 27 February (R. A. Rowlett), and J. W. Eike found 2 near Clifton on 2 February. According to R. S. Freer, Mrs. R. E. Ricketts found 15 in Amherst County 28 January, and 2 were seen at Lynchburg 13 February by Mr. and Mrs. E. C. Suhling. C. E. Stevens found 1 along the Hardware River in Fluvanna County east of Scottsville on 18 March. The only record from southeastern Virginia was 1 that appeared at the feeder of Mrs. Ann Curfman in Hampton and remained from 25 February to 27 March 1972. Many observers got to see this bird, and it was netted, banded, and photographed by Mrs. Dorothy L. Mitchell and later retrapped and photographed by W. P. Smith.

OREGON JUNCO IN NEWPORT NEWS. According to Mr. and Mrs. Sydney Mitchell a good-plumaged Oregon Junco was noted off and on at their home in Newport News from 16 January to 31 March 1972. The bird clearly had a band on its leg, but efforts to trap it were unsuccessful.

CORRIGENDUM. The dead Barn Owls reported in *The Raven*, vol. 43, page 61, 1972, were picked up on 27 December 1971, not 1972 as reported.

INFORMATION FOR CONTRIBUTORS

THE RAVEN, as the official publication of the Virginia Society of Ornithology, performs two main functions. First, it publishes original contributions and review articles in ornithology, not published elsewhere, mostly relating to the birdlife of Virginia. Second, it serves as the proceedings of the Society and, as such, publishes news of the Society's activities. THE RAVEN may also rarely reprint an article published elsewhere if it appears to be of particular interest to VSO members. Although most bird papers published in THE RAVEN concern the distribution, abundance, and migration of birds in Virginia, other aspects of ornithology are also covered, such as life-history and behavioral notes, especially when these are based on observations in Virginia, and historical and bibliographic reviews. In addition to these, this magazine is also anxious to receive news items of interest to VSO members, such as the activities of VSO chapters and the various public and private organizations engaged in biological and conservation work in Virginia.

All contributions should be sent to the Editor. They should be typed double-spaced (*everything*, including tables and literature cited)—on $8\frac{1}{2}$ -by-11-inch good quality paper on one side only with wide margins all around. Publications for review should also be sent to the Editor. Although THE RAVEN will try to remain flexible in its style requirements, it will be appreciated if contributors will adhere as closely as possible to the style used in current issues. Reference to a good style book is always helpful. Most useful is probably the *CBE Style Manual*, third edition, prepared by the Council of Biological Editors. It is available for \$6.00 from the American Institute of Biological Sciences, 3900 Wisconsin Avenue, N. W., Washington, D. C. 20016. Authors contemplating submitting long papers or those with extensive tabulations or figures should contact the Editor in advance.

Under most circumstances vernacular and technical names of birds should adhere to those in the Fifth Edition of the A.O.U. *Check-list of North American Birds*. For bird measurements and weights, metric units are now the accepted standard. All figures and tables should be on separate pages and not included in the narrative text, and figures must be in a form suitable for photographic reproduction. Any extensive changes in figures must be charged to the author. Orders for reprints must be made before copy goes to press.

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), \$3.00 for active members, \$5.00 for sustaining members, \$10.00 for contributing members, \$100.00 for life members.

OFFICERS OF THE VSO

- *President:* MITCHELL A. BYRD, Department of Biology, College of William and Mary, Williamsburg, Virginia 23185.
- Vice President: J. J. MURRAY, JR., Department of Biology, University of Virginia, Charlottesville, Virginia 22903.

Secretary: ROBERT J. WATSON, 2636 Marcey Road, Arlington, Virginia 22207.

Treasurer: MRS. RUTH A. BECK, Department of Biology, College of William and Mary, Williamsburg, Virginia 23185.

Editor Emeritus: J. J. MURRAY

Editor: F. R. Scott, 115 Kennondale Lane, Richmond, Virginia 23226.

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RESULTS OF THE TAZEWELL-BURKES GARDEN FORAY—JUNE 1972

F. R. Scott

The sixth of the recent VSO-sponsored breeding bird forays was held in the Tazewell-Burkes Garden area of Tazewell County, Virginia, 14-18 June 1972. As in the past the object of the foray was to make as complete a survey of the breeding birds of the area as possible. The total registration of 50, almost all of whom were active in the field, was the best turnout of any of the forays thus far. The foray was directed by Richard H. Peake, Jr., and the local arrangements were handled mostly by Mrs. Sarah Cromer, Miss Annella Greever, Mrs. Madeline Hurt, Miss Louise Leslie, and other members of the Clinch Valley Bird Club.

The area covered included most of Tazewell County with special emphasis on Burkes Garden and its surrounding ring of mountains in the extreme southeastern part of the county. Adjacent areas to the south and east in Bland and Smyth counties were also covered, and several field trips were made somewhat farther afield to the Clinch Mountain Wildlife Management Area of the Virginia Commission of Game and Inland Fisheries in extreme southeastern Russell County adjoining Tazewell County on the west. This latter area includes an interesting high-altitude lake as well as one of the higher mountain peaks in the area. The town of Tazewell served as headquarters for the foray, and some bird banding was carried out here during two days of the foray by Mrs. Betty Lancaster.

Physiographically, the foray area is dominated by a series of mountain ridges and valleys running in general on a northeast-southwest axis. Drainage in the eastern part of the area, including Burkes Garden, is to the New River to the northeast, whereas the rest of the area drains westward into the Clinch or Holston rivers. The Tennessee Valley Divide, in fact, runs along the ridge forming the western and most of the southern boundary of Burkes Garden, and the Clinch River essentially rises in the town of Tazewell. Burkes Garden itself is a fairly flat, elliptical high mountain valley about 8 by 4 miles in size (ridge to ridge) walled in on all sides by mountain ridges and with only one narrow drainage outlet.

Altitudes in the study area are rather high. The lowest areas covered were 1700-1800 feet elevation along the entrance road to the Clinch Mountain Wildlife Management Area and in several other stream valleys, though from a time standpoint very little field work was done below 2000 feet. Tazewell itself is at about 2400 feet, and most of the valley areas covered range from 2000 to 2600 feet except for Burkes Garden, the floor of which varies from 3050 to 3200 feet. Mountain elevations around Burkes Garden include 3800 to 3950 feet on the north (Garden and Round mountains), 4000 feet on the east and south (Garden Mountain), and 4400 to 4700 feet on the west (Chestnut Ridge and Beartown Mountain, the latter here referred to as Tazewell Beartown to distinguish it from another by the same name). Tazewell Beartown forms the eastern anchor of Clinch Mountain, which extends many miles southwesterly. About 28 miles along this ridge to the southwest lies the other Beartown Mountain, here called Russell Beartown, in the Clinch Mountain Wildlife Management Area. At 4689 feet, it was the second highest peak in the study area. Just east of here, also in the wildlife management area, lies

Laurel Bed Lake, a 1.6-mile long shallow lake which, at 3550 feet, is one of the highest in Virginia. Some of the more botanically oriented participants in the foray were distressed to find evidence that the flooding of this lake basin may have destroyed an outstanding bog formation. Moderate stands of red spruce occur only on the two Beartowns, though a few scattered trees can be found around Laurel Bed Lake.

The following annotated list of the birds observed during this foray totals 119 speices plus one hybrid and was compiled from over 50 field lists submitted by the various parties who participated in the foray field work. At best this should be considered a preliminary list of the breeding birds of the area, as no four-day foray can possibly give a complete picture of the birdlife of any area as complex as this one. One problem that always surfaces in a survey of this type is that the observers are highly dependent on bird song. If the birds are not singing, they are easily missed, and an accurate determination of their true population becomes difficult or impossible. On this foray some early nesting species were clearly past their peak song periods, and poor weather conditions, with fog and light rain on two of the days, had a significantly depressing effect on bird singing. Some species-such as owls, Whip-poor-wills, or birds with very limited habitat-also require rather specialized field work, which is often not practical on a survey like this one. Thus generalizations are made in the annotated list only when there are enough field data to support them, and readers should take care in making assumptions about species that were recorded only a few times or not at all. Several species were looked for but not found. These included Black Duck, Cooper's Hawk, Great Horned and Long-eared Owls, Common Nighthawk, Yellow-bellied Sapsucker, Cliff Swallow, Purple Martin, Yellow-throated and Pine Warblers, and Henslow's Sparrow. Five of these were, however, recorded on the nearby 1966 Abingdon foray (Scott, 1966).

No thorough literature search of the birds of this area has been made, but three previous publications deserve mention, and, where warranted, comparisons are made with these and the field work reported here. J. J. Murray, Alexander Wetmore, and John Graf spent the first week of June 1940 studying the birds in Burkes Garden (Murray, 1940), and their observations are particularly significant to this report. The first VSO breeding bird survey (Scott, 1966) was based at Abingdon in June 1966, and that study area partially overlapped the 1972 foray at Clinch Mountain Wildlife Management Area, although Laurel Bed Lake was apparently not in existence at that time. Comparison of this year's foray with that based at Abingdon is particularly instructive, since a great deal of the Abingdon foray field work was conducted below 2000 feet, whereas very little field work on the Tazewell foray was below that elevation. As a probable result many species, mostly of Carolinian affinities, were decidedly less common in the Tazewell area than in the Abingdon region (e.g., Mourning Dove, Carolina Wren, Mockingbird, Warbling Vireo, Yellow Warbler, Prairie Warbler, Orchard Oriole, Summer Tanager, and Cardinal). Stevens (1967) reported in some detail on several trips to the two Beartown Mountains during and following the 1966 Abingdon foray.

I am indebted to Richard H. Peake, Jr., who read over a preliminary draft of this report and made a number of useful suggestions.

Pied-billed Grebe. One was found at the Sportsman's Club close to the entrance to Burkes Garden on 16 June (Mrs. D. L. Mitchell, Mrs. Betty Lancaster, *et al.*). At Laurel Bed Lake a maximum of 3 was found on 16 June

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(A. B. Davenport, C. E. Stevens, and T. F. Wieboldt), 2 of which vocalized repeatedly from different territories.

Great Blue Heron. One report, a single bird at the Burkes Garden mill pond on 15 June (Jeanette Boone, J. W. Eike, and Gertrude Prior).

Green Heron. A few were noted along the major stream valleys as well as higher up in Burkes Garden and at Laurel Bed Lake.

Mallard. These were recorded at four locations. Two were seen south of Tazewell on 15 June (Mitchell *et al.*) and one at the Sportsman's Club (with a test) on 16 June (Mitchell *et al.*). In Burkes Garden two adults and two broods containing 4 and 7 young were found 15 June (Eike *et al.*), while at Laurel Bed Lake there were at least three nesting pairs. Stevens and others found 4 adults and two broods of 4 and 7 young here on 16 June, and a pair plus two females followed by broods of 7 and 9 were seen on 17 June (Eike *et al.*).

Wood Duck. Fairly common. Broods were reported at Falls Mills Lake near Bluefield, Thompson Valley south of Tazewell, Burkes Garden, and Laurel Bed Lake. At least four different broods plus a number of nearly grown young were seen at Burkes Garden.

Greater Scaup. A male of this species was seen both at rest and in flight at Laurel Bed Lake on 17 June (F. R. Scott *et al.*). The rounded shape of the head and the relatively long wing stripe precluded this being a Lesser Scaup, although the latter is more to be expected as a summer straggler.

Turkey Vulture. Common, with a maximum count of 22.

Black Vulture. Rather uncommon. Reported on only six field cards with a peak of 14 on the slopes of Russell Beartown on 17 June (Stevens *et al.*).

Sharp-shinned Hawk. One record, a single bird seen northwest of Tazewell 17 June (Mitchell *et al.*). An unidentified Accipiter was found at Laurel Bed Lake on 15 June (R. H. Peake *et al.*).

Red-tailed Hawk. Fairly common, with 16 birds reported by 12 parties.

Red-shouldered Hawk. Two reports, one southwest of Tazewell 15 June (Peake *et al.*) and 2 in Poor Valley in southern Tazewell County also on 15 June (Scott).

Broad-winged Hawk. Recorded only twice, 4 in extreme western Bland County just south of Chestnut Ridge on 15 June (Scott) and one on Chestnut Ridge 17 June (P. S. Dulaney and Gertrude Prior).

American Kestrel. Two reports. Four birds plus a nest with unknown contents were found near Pisgah, just west of Tazewell, on 16 June (Mitchell *et al.*), and one was seen in Burkes Garden on 18 June (Scott).

Ruffed Grouse. Surprisingly uncommon. Reported by eight parties, all above 3200 feet, with a peak of 8 at Laurel Bed Lake 15 June (Peake *et al.*). At least one young was reported on Garden Mountain on 15 June (R. J. Watson). Stevens (1967) reported 21 including 14 young in three groups on Tazewell Beartown on 3 July 1966, so the species is probably more common than our records indicate.

Bobwhite. Common up to about 3400 feet.

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Turkey. Two records, one on Garden Mountain on 15 June (Mrs. J. R. Henkel *et al.*) and 6 on Chestnut Ridge on 17 June (P. S. Dulaney and Gertrude Prior).

Killdeer. Fairly common up to 3200 feet with a peak of 10 in western Bland County 15 June (P. S. and Elizabeth Dulaney).

American Woodcock. Two records, one at Laurel Bed Lake 15 June (Peake et al.) and one on the summit of Tazewell Beartown 16 June (Scott). This species has been previously reported in summer on Tazewell Beartown (Stevens, 1967).

Spotted Sandpiper. On record. Two, apparently a pair, were seen at Laurel Bed Lake 17 June (Eike *et al.*).

Mourning Dove. Fairly common below 3500 feet but seemingly less common than in other, lower areas of southwestern Virginia. The peak count was only 14.

Yellow-billed Cuckoo. Fairly common, with a peak count of 9. Most records were below 3600 feet.

Black-billed Cuckoo. Rather uncommon with only 6 birds reported by four parties. All but one report were from Burkes Garden.

Screech Owl. One report, 2 birds in Burkes Garden on 16 June (Scott and R. J. Watson).

Barred Owl. Several reports from Burkes Garden, the Cove Creek area, and Laurel Bed Lake, with up to 3 being seen and heard by several parties at the last location.

Saw-whet Owl. Mr. and Mrs. John H. Dalmas saw and submitted a detailed written description of a small owl fulfilling the description of this species on the night of 17 June near the top of Brushy Mountain, Tazewell County, and Virginia Rt. 16. The bird was watched for some time in the automobile head-lights both on the road surface and later on a rocky ledge beside the road. Ear tufts were looked for but were clearly not present, and the plumage description was typical of an adult Saw-whet Owl.

Whip-poor-will. Not common, but the weather was poor for much singing by this species. Several were noted up to about 3600 feet.

Chimney Swift. Rather common, principally around the towns but reported in all areas and at all elevations.

Ruby-throated Hummingbird. Fairly common below 3600 feet with a maximum day's count of 5.

Belted Kingfisher. Fairly common along the stream valleys but also noted at the Sportsman's Club near Burkes Garden and at Laurel Bed Lake. One was carrying food to a nest hole northeast of Tazewell 17 June (Mitchell *et al.*).

Common Flicker. Common at all elevations with a peak count of 12.

Pileated Woodpecker. Fairly common in small numbers at all elevations where there was big hardwood timber.

Red-bellied Woodpecker. Rather uncommon with 12 birds reported by eight parties. All records were under 3400 feet.

Red-headed Woodpecker. Quite uncommon. Noted in Burkes Garden by three parties and at three other locations.

Hairy Woodpecker. Uncommon, with 15 birds reported by eight parties.

Downy Woodpecker. Common at all altitudes.

Eastern Kingbird. Rather common in the lowlands but recorded at least up to 3600 feet. The maximum count was 9. Adults at nests with unknown contents were noted at Burkes Garden 16 June (Mitchell *et al.*) and in Freestone Valley 17 June (Eike *et al.*).

Great Crested Flycatcher. Common at least to 4000 feet with a peak count of 12.

Eastern Phoebe. Common, mainly below 3400 feet. The peak count was 17 in northeastern Tazewell County on 17 June (Mitchell *et al.*).

Acadian Flycatcher. Common at lower elevations, with records up to 3700 feet at Laurel Bed Lake. The peak count was 23.

Willow (Traill's) Flycatcher. Fairly common, at least locally, mainly in the stream valleys. Mitchell and others recorded the peak of 12 in northeastern Tazewell County on 17 June. Found up to 3050 feet in Burkes Garden where a maximum of 3 singing males was located at Gose Mill 18 June (Scott). Although most birds were found in alder thickets, 3 singing males were discovered on dry hillsides in the town of Tazewell within sight of the headquarters motel on 16 June (Scott). Murray (1940) did not record this species in Burkes Garden.

Least Flycatcher. Local and apparently scarce. Five parties recorded up to 4 different birds in Burkes Garden, but the species was reported in only two other locations, both in the lower country west and northeast of Tazewell. Murray (1940) did not record it.

Eastern Wood Pewee. Common at all elevations. A nest with unknown contents was found in Burkes Garden 15 June (Eike *et al.*).

Horned Lark. Recorded only at Burkes Garden with peaks of 5 on each of two days. Probably more common and well distributed than the available records indicate. This was not recorded by Murray (1940).

Tree Swallow. Local and uncommon; found in four places. Mitchell and others reported one in northeastern Tazewell County on 17 June. At Laurel Bed Lake they were noted by four parties with a maximum of 7 on 15 June (Peake *et al.*), and Scott saw an adult feeding a fledged young here on 17 June. Up to 4 birds were seen at the Sportsman's Club near Burkes Garden by several parties, and Peake and others saw adults entering and leaving a nest hole here on 17 June. At nearby Burkes Garden on 18 June Scott found a pair feeding 3 young in a nest in a fence post along the east loop road. The above records seem to be the first published nesting evidence for the Tree Swallow in Southwest Virginia, although I am informed that Anthony Decker saw a Tree Swallow carrying nesting material at Laurel Bed Lake on 26 May 1971.

Rough-winged Swallow. Fairly common along the stream valleys with a peak of 8 in the Falls Mills-Bluefield area. A few were also recorded at the Sportsman's Club, Burkes Garden, and Laurel Bed Lake.

Barn Swallow. Common in the valleys and in Burkes Garden. Only a few recorded over 4000 feet. Adults feeding young were found in Thompson Valley 15 June (Mitchell *et al.*).

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Blue Jay. Fairly common at all elevations with a peak count of 8.

Common Raven. Uncommon and local. One to 3 birds were noted at Thompson Valley, Burkes Garden, Round Mountain, and both Beartowns.

Common Crow. Comman at all elevations. Young out of the nest were found in several locations.

Carolina Chickadee. Fairly common at least to 3700 feet, though Stevens (1967) reported finding a number with the typical calls of this species on Tazewell Beartown in June and July 1966, even in the spruce stands. Birds showing some affinities with the Black-capped Chickadees were noted on several occasions. Peake found a bird at the Sportsman's Club (3000 feet) on 17 June with the typical two-note song of the Black-capped but the characteristic call notes of the Carolina Chickadee, and at Laurel Bed Lake (3600 feet) Scott similarly heard a chickadee with the normal two-note song of the Black-capped on 17 June. On Tazewell Beartown (4700 feet) on 15 June Stevens and Wieboldt heard 3 different birds singing the two-note song but thought the call notes were more reminiscent of the Carolina Chickadee, whereas in the same area on 16 June Scott and R. J. Watson found 3 chickadees, which, while they did not sing, had the slow and throaty call notes typical of the Black-capped! Murray (1940) also reported 2 chickadees with two-note songs in this area in June 1940. The latest work on hybridization of these two species in this area was done at Mountain Lake, Virginia, by David W. Johnston (1971). Although the evidence here clearly points to a hybrid chickadee population at high elevations, there is no information on where the nearest population of Black-capped Chickadees is. A possible hybrid chickadee was carrying food to a nest hole at Laurel Bed Lake 15 June (Peake et al.), and 2 young Carolinas out of the nest were observed at Burkes Garden the same day (Eike et al.).

Tufted Titmouse. Common below 3000 feet with a peak count of 25. Only fairly common at higher elevations with all counts under 8. Two young out of the nest were seen at Burkes Garden 15 June (Eike *et al.*).

White-breasted Nuthatch. Fairly common, with a maximum count of 9. An adult was feeding a fledgling along Tazewell County Rt. 601 on 15 June (Gisela Grimm *et al.*), and another adult was feeding 2 young out of the nest at the Sportsman's Club 17 June (Peake *et al.*).

Red-breasted Nuthatch. Recorded twice, with 4 birds each on Tazewell Beartown on 15 June (Stevens and Wieboldt) and on Russell Beartown on 17 June (Stevens *et al.*). These were all in or quite close to stands of red spruce.

House Wren. Common below 3200 feet, mainly in town residential areas. The maximum count was 19 in northeastern Tazewell County on 17 June (Mitchell *et al.*). Mrs. Lancaster banded 7 House Wrens in Tazewell in 3 hours of trapping on each of two days. Up to 4 were found by several parties in Burkes Garden, where Murray (1940) did not record it. An adult was feeding young at Tazewell 15 June (Mitchell *et al.*).

Winter Wren. Local at higher elevations. Recorded by four parties in three localities at Laurel Bed Lake, Tazewell Beartown, and Russell Beartown, with a peak of 4.

Bewick's Wren. Two records, a single bird on Clinch Mountain south of Tazewell on 15 June (Scott) and 3 on the slope of Russell Beartown on 17

June (Stevens *et al.*). In 1940 Murray thought it fairly common in Burkes Garden, where it evidently is now either rare or absent.

Carolina Wren. Fairly common below 3000 feet, and only one was recorded in Burkes Garden, where Murray (1940) did not find it. An adult was feeding young in Tazewell on 15 June (Mitchell *et al.*).

Mockingbird. Rather uncommon, with all reports below 3200 feet. Curiously, the peak count of 6 was in Burkes Garden, where Murray (1940) did not find it. This species was common in the lowlands of the Abingdon foray area (Scott, 1966).

Gray Catbird. Common at all elevations but less so on the two Beartowns. The peak count was 31.

Brown Thrasher. Common at least to 3600 feet, with a few higher records. A newly fledged young was seen in Burkes Garden 17 June (Peake *et al.*).

American Robin. Very common at all elevations with a maximum count of 112 in Burkes Garden. A nest with one egg was found at the Sportsman's Club 15 June (Mrs. Connie Stone *et al.*).

Wood Thrush. Common at all altitudes.

Veery. Common above 3500 feet, with a maximum count of 25. Not recorded on the floor of Burkes Garden.

Eastern Bluebird. Fairly common and well distributed below 3600 feet with a peak count of 8. Two young out of the nest were found in Burkes Garden 14 June (Grimm *et al.*).

Blue-gray Gnatcatcher. Fairly common, mostly below 3500 feet, with a maximum count of 16. Reported by four parties in Burkes Garden (peak, 8), although Murray (1940) did not record it here. Curiously, only 3 birds were found on the Abingdon foray (Scott, 1966).

Golden-crowned Kinglet. One record of 10 birds on Russell Beartown on 17 June (Stevens et al.). It was also recorded on Tazewell Beartown in June and July 1966 (Stevens, 1967).

Cedar Waxwing. Fairly common. Reported by 14 parties with a peak count of 10. Adults were feeding young out of the nest at Laurel Bed Lake 17 June (Eike, Scott, *et al.*), a rather early date for this species.

Loggerhead Shrike. One report, a single bird along Wolf Creek, Bland County, on 16 June (Peake *et al.*). Murray (1940) did not find it in Burkes Garden, and only 4 birds were recorded on the Abingdon foray (Scott, 1966). Wallace Coffey (1968) found an active nest at Nickelsville, in nearby Scott County, in April 1966, and both he and Peake (*personal communication*) believe this species is just now invading this area as a breeding bird from nearby Tennessee.

Starling. Abundant in all open areas at least to 3500 feet, with a few found higher. Adults were feeding young in the nest near Pisgah on 16 June (Mitchell *et al.*), and fledged young were seen in Burkes Garden 18 June (Scott).

White-eyed Vireo. Rather common at least to 3600 feet, with a peak count of 14.

Yellow-throated Vireo. Fairly common at the lower elevations with a maximum count of 8. Recorded up to 3600 feet at Laurel Bed Lake.

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Solitary Vireo. Common if somewhat local above 3500 feet with a peak count of 20 but recorded down at least to 2900 feet.

Red-eyed Vireo. Very common at all elevations. An adult on a nest with unknown contents was found along Rt. 91 on 15 June (Grimm et al.).

Warbling Vireo. One record, a bird in Burkes Garden on 17 June (Peake *et al.*). At 3100 feet, this should be close to an altitude record for Virginia. This species was considered fairly common below 2100 feet on the Abingdon foray (Scott, 1966).

Black-and-white Warbler. Fairly common at all elevations with a peak count of 24.

Worm-eating Warbler. Fairly common with 17 birds recorded by 9 parties. With a maximum count of only 4, it was apparent that this bird was not singing well at the time of the foray. Two more recorded in Burkes Garden, where Murray (1940) did not find it.

Golden-winged Warbler. Fairly common if somewhat local, with 23 birds reported by nine parties and a maximum of 8. Recorded as low as 2200 feet.

Brewster's Warbler. One was observed carefully in the Cove Creek area of Tazewell County (Rt. 662) on 18 June by Mrs. D. L. Mitchell, who submitted a good written description of the bird.

Northern Parula Warbler. Fairly common at least to 3600 feet with a peak count of 16.

Yellow Warbler. Rather common at lower elevations at least to 3200 feet with a few higher reports. With a peak count of 15, this species was decidedly less common than it was during the Abingdon foray at lower altitudes (Scott, 1966).

Magnolia Warbler. Locally fairly common in the spruce on the two Beartowns, with a peak of 7 on Tazewell Beartown on 15 June (Stevens and Wieboldt). Also found at Laurel Bed Lake, with 5 singing males on 15 June (Peake *et al.*) and 3 on 16 June (Stevens *et al.*). The latter is a new breeding season location for this bird in Virginia, though it is only about 5 miles northeast of the population on Russell Beartown.

Black-throated Blue Warbler. Fairly common above 3000 feet with a maximum count of 14.

Black-throated Green Warbler. Locally fairly common above 3500 feet with a peak count of 15 at Laurel Bed Lake on 15 June (Peake *et al.*). A few were found locally down to 2300 feet. Much seemingly ideal habitat for this bird appeared to be unutilized.

Cerulean Warbler. Probably fairly common but local with 16 birds reported by seven parties and a peak of 7 on Round Mountain on 16 June (Peake *et al.*). Altitudes were generally between 2500 and 3800 feet.

Blackburnian Warbler. Apparently uncommon and local; reported by only five parties. The peak count of 7 was recorded 15 June in extreme southwestern Bland County between 2200 and 2400 feet (Scott). It was surprising not to find it more common in this area, since it was listed as common at high elevations in the Abingdon area (Scott, 1966).

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Chestnut-sided Warbler. Common above 3000 feet, with a few records below that, but not recorded on the floor of Burkes Garden. The peak count was 40 at Laurel Bed Lake on 15 June (Peake *et al.*).

Blackpoll Warbler. Two found along Wolf Creek in western Bland County on 15 June (Dulaneys) were almost certainly late transients.

Prairie Warbler. Apparently uncommon, but actually recorded by only six parties with a peak count of 8. The birds were singing very poorly. Most reports were below 3000 feet, and only 2 were found in Burkes Garden, where Murray (1940) did not find it. It was recorded as fairly common during the Abingdon foray (Scott, 1966).

Ovenbird. Common at all elevations with a maximum count of 49. A nest with unknown contents was seen at the Sportsman's Club 16 June (Mitchell *et al.*).

Louisiana Waterthrush. Fairly common up to 3600 feet with a maximum count of 10. Two adults feeding 3 young out of the nest were seen in the Cove Creek area 18 June (Mitchell *et al.*).

Kentucky Warbler. Fairly common in the lowlands at least to 3200 feet with a few reports above that, including one at 3850 feet on Garden Mountain on 15 June (R. J. Watson). The peak count was 12.

Common Yellowthroat. Common below 3600 feet with a few higher reports.

Yellow-breasted Chat. Common in the lowlands; recorded up to at least 3700 feet. The peak count was 22.

Hooded Warbler. Common at least to 3600 feet with a maximum count of 15. Two were also found on Russell Beartown on 17 June, one at 4600 feet (Stevens *et al.*).

Canada Warbler. Common above 3500 feet with a high count of 11. A nest with 3 eggs plus one cowbird egg was found on Garden Mountain 15 June (Margaret Watson *et al.*).

American Redstart. Common at least to 3600 feet with a peak count of 24.

House Sparrow. Very common in the lowlands at least to 3200 feet in Burkes Garden.

Eastern Meadowlark. Very common in the lowlands and in Burkes Garden.

Red-winged Blackbird. Abundant in the lowlands and in Burkes Garden. Up to 10 were also reported at Laurel Bed Lake. Fledged young were seen in Burkes Garden 18 June (Scott).

Orchard Oriole. Surprisingly uncommon with 11 birds reported by four parties and a maximum count of 6. While most of these were in the lowlands, 4 birds were found by two parties in Burkes Garden, where Murray (1940) did not record it. On the Abingdon foray this bird was common but was not recorded above 2000 feet (Scott, 1966).

Northern Oriole. Common in the lowlands with a peak of 18. Up to 5 birds were reported by many parties in Burkes Garden (3100 feet) where Murray (1940) did not find it. On the Abingdon foray this species, though common, was not recorded above 2000 feet (Scott, 1966). A nest with young was found in Burkes Garden 15 June (Eike *et al.*), and adults were feeding young out of the nest near Pisgah 16 June (Mitchell *et al.*).

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Common Grackle. Very common up to at least 3200 feet, with a few higher reports at Laurel Bed Lake and elsewhere. A newly fledged young was seen in Burkes Garden 17 June (Peake *et al.*).

Brown-headed Cowbird. Fairly common at all elevations with a peak count of 22. One cowbird egg was found in a Canada Warbler nest on Garden Mountain 15 June (Margaret Watson *et al.*).

Scarlet Tanager. Common at all elevations with a high count of 19. A pair at a nest with unknown contents was seen on East River Mountain (Cove Creek area) on 16 June (Peake *et al.*).

Summer Tanager. Three records of single birds, all apparently below 2800 feet. On the Abingdon foray this species was fairly common, but all records were below 2000 feet.

Cardinal. Fairly common up to about 3200 feet and generally scarce above that, with one bird singing at 4700 feet on Tazewell Beartown on 15 June (Stevens and Wieboldt).

Rose-breasted Grosbeak. Rather common above 3600 feet with a peak count of 14. There were several lower records. A nest with 3 young was found on Round Mountain, Bland County, at 3800 feet on 16 June (Peake *et al.*).

Blue Grosbeak. Three records, a bird seen near Adria, just north of Tazewell, on 15 June at about 2100 feet altitude (Mrs. Connie Stone *et al.*), a male singing in Thompson Valley the same day (Mitchell *et al.*), and a female in Tazewell on 18 June (Mitchell *et al.*).

Indigo Bunting. Common below 3200 feet with a high count of 60. Generally less common above this up to the highest elevations.

American Goldfinch. Common at all altitudes with a peak count of 70 in Burkes Garden.

Red Crossbill. One record, a single bird on Tazewell Beartown on 15 June (Stevens and Wieboldt). There are previous summer records from here as well as Russell Beartown (Stevens, 1967).

Rufous-sided Towhee. Very common at all elevations with a maximum of 90. An adult was carrying food to a nest at the Sportsman's Club 15 June (Stone *et al.*).

Savannah Sparrow. One report, a bird seen in Burkes Garden on 16 June (Lancaster, Mitchell, *et al.*). This appears to be the first breeding season record for Southwest Virginia.

Grasshopper Sparrow. Apparently common below 3000 feet with an amazing peak of 50 south of Tazewell on 15 June (Mitchell *et al.*). A few (up to 5) were also noted in Burkes Garden, where Murray (1940) found only one. This species was not singing well during most of the foray period.

Vesper Sparrow. Rather common in Burkes Garden with a maximum count of 14, but only recorded twice elsewhere. This bird was singing poorly during the foray period and may well be more generally distributed than these records indicate. The Abingdon foray (Scott, 1966) recorded it as "fairly common at high elevations" (i.e., above 4000 feet).

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Dark-eyed Junco. Common above 3500 feet with two peak counts of 16. Several also noted lower with 2 near Adria (2100 feet) on 15 June (Stone *et al.*).

Chipping Sparrow. Common below 3200 feet with a few reports higher. Adults were feeding young out of the nest in Thompson Valley 15 June (Mitchell *et al.*).

Field Sparrow. Common below 3800 feet with a few reports from higher elevations.

White-throated Sparrow. One record, a singing bird in Burkes Garden (3100 feet) on 16 June (Scott and R. J. Watson). There is no breeding record of this bird for Virginia.

Song Sparrow. Common up to 3600 feet with two peak counts of 40. Adults were feeding young out of the nest in Thompson Valley 15 June (Mitchell *et al.*).

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115 Kennondale Lane, Richmond, Virginia 23226

KIPTOPEKE DIARY, 6-15 OCTOBER 1972

WALTER POST SMITH

Friday, 6 October:

Fatty-Pie (my wife) picked me up at the office at 3:00 p.m., a practice commonly referred to there as "casualing-out on Friday afternoon" and rather frowned on by the hierarchy. To be completely truthful, I suppose I didn't really have to leave at that time, but with the unbelievably good news about the reopening of the Chesapeake Bay Bridge-Tunnel just the day before, I guess the old adrenaline was surging. I figured that if we could get the car loaded by 4:00 p.m., we could leave home in time to meet John and Nancy Pond at the motel, have a short "happy-hour," and enjoy crab imperial at Paul's Restaurant in Cheriton that night!

It had been only several weeks before that during a severe northeaster, a large barge had broken loose from its tug, crashed into the bridge-tunnel complex

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about 2 miles north of its southern end, and so severely damaged it at five points that the bridge-tunnel had been closed to vehicular traffic. This was indeed an unexpected jolt to our fall banding project at Kiptopeke Beach. Suddenly, those of us in the southeastern part of Virginia, who frequently made the 50-mile or less trip to Kiptopeke to help with the operation, were faced with a trip of over 400 miles up to Annapolis, Maryland, across the Bay Bridge there, and down the long Delmarva Peninsula to our banding station at its southern tip of Kiptopeke. Since this meant that the BIC (bander-in-charge) could no longer count on emergency help on "big" days, our operation was subject to drastically reduced activity!

You can imagine my relief when the papers announced on Thursday that the bridge-tunnel would be reopened for traffic with only a one-lane restriction for about 2 of the 17 miles.

Fatty-Pie had been packing off-and-on all week, and since most of the equipment such as collecting boxes, nets, poles, etc. had been transported to the station when it was opened on September 2, I figured it wouldn't take long to load the trunk, lock-up the house—and take off.

The guys at the office had been kidding me all day about the weather predictions for rain over the weekend. Sure enough, by the time I had ticked off the last item on my check-list and was backing out of the driveway, Fatty-Pie remarked on the suspicious-looking wet specks on the windshield. I replied, rather hollowly, "Probably just prefrontal activity of the cold front due tonight —we'll probably be loaded with birds in the morning." This astute observation elicited no reply as Fatty-Pie, exhausted from one of her usual busy days, had settled back for "forty winks," and I was left with my own thoughts.

As I stopped at the bridge-tunnel toll plaza, I could see a line of cars ahead, waiting to proceed. I had no more than pulled into the line, when it started moving forward—that I took as a good omen for the coming week! The 2-mile stretch of one-way traffic at 25 miles per hour moved steadily and I'm sure required no more than 10 minutes longer than normal. The damaged bridge sections were in various states of repair and were easily discernible. Then the traffic pattern stretched out, and as the car settled down into that undulating, rocking-chair motion that anyone who has driven over the bridge-tunnel will recognize, my thoughts raced ahead through the intermittent showers to the banding station.

How had the birds and the weather treated Mike Mitchell, the reigning BIC? Who would we find there tonight—and tomorrow—and next week, which was to be ours? This was the end of the fifth week of our 6-week operation this year, and Mike had reported, at midweek, that the running total was about 4500 individuals of 90 species. That had to be considered rather disappointing in light of last year's totals of 9680 individuals of 102 species, and it appeared that even if we had a "super" week, with upwards of 2000 banded, we would still fall far short of last year's totals.

Fatty-Pie came to the surface just as I pulled into the Peacock Motor Inn, and we soon were relaxing at the "happy-hour." Dorothy and Mike Mitchell lamented being rained out for the day, but proudly reported their banding "goodies" for the week—a Screech Owl and an unbelievable Marsh Hawk! As few Marsh Hawks as we see at the banding station, imagine the thrill of having one hang-up in a net and of being able to band it! It was not only a new species for the year, but a new one for the 10 years of operation.

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I avidly checked through the field summary of species banded each day, with the thought in mind of seeing what had and, conversely, had not shown up so far this year. As compiler of the annual station summaries, I find this data fascinating, particularly since it can vary so widely from year to year. The Myrtle Warblers and kinglets appeared to be late in arriving this year, and the various sparrows just really had not started through at all. From all reports I had had from the banding station, the coastal raptor migration was considerably down this fall, with no reports of days on which the Kestrels and Sharpies streamed by overhead all day long, such as had occurred in past years.

So, I was a little surprised to note that Mike had banded 14 Sharpies the past week and must admit to considerable envy, since most of my past banding had been at the start of the operation, before the Sharpies arrived.

When the demands of the hungry banders outweighed those of the thirsty new-arrivals, we piled into two cars and set off through the rain for Paul's Restaurant in Cheriton, where, as I suspected, I had *not* forgotten how delicious Paul's crab imperial was!

Back at the motel, the late weather report was certainly not too reassuring. The cold front we had been expecting that night seemed to have stalled on the Allegheny ridges, and a low-pressure area had formed off Cape Hatteras and was driving up the coast, with a simple prediction of "rain, at times heavy" for Saturday.

"Oh, well," I thought, "things just might change during the night." And as I dropped off to sleep, it was like cutting on a color TV: there is front of me were kinglets and White-throated Sparrows hitting the nets—so real I could almost feel them on my fingertips. And I don't mean one or two, either—I mean a dozen or so in each net!

Saturday, 7 October:

It was 4:45 a.m. when my eyes finally popped open for good. I thought, disgustedly, "Things are normal—I just never seem to sleep well at Kiptopeke, either from excitement or anticipation." I lay there, collecting my thoughts, and dimly remembered, as I had turned over several times during the night, hearing the rain pittering down and the wind soughing through the trees. Now, I suddenly became aware that there was no sound outside, not even a drip from the motel eaves. This thought spurred me up out of the covers, and I hurriedly stepped into some pants and slipped out of the door.

From what direction was the wind coming? There appeared to be none at all, and no stars. I judged the temperature to be in the sixties. I cupped my ears and listened in vain for overhead "peeps" of migrants, and as I turned back to my room I could feel a suggestion of moisture on my cheek.

I performed my morning ablutions, painfully prodded Fatty-Pie out of bed, and we settled back with coffee and sticky-buns to await the BIC's decision. Presently, Mike tapped on the door and announced that, in spite of the dire weather prediction, we might as well go on down to the station and sort of play it by ear from there.

The sky was lightening rapidly and the woods were quiet as a tomb as we made the rounds of the nets, opening them. I had promised John and Nancy Pond faithfully that if they kept coming (their visits on two previous years were on days that were complete "duds"), they would be bound to hit a "big" one, and my instincts for the day kept shouting, "No, not again!"

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The wind was from the northeast and picking up steadily, but the birds were pretty slow, and obviously it would be that kind of day. John was pleased when we brought in a female Blue Grosbeak, one of the three we were to get for the year, and we had two early Sharpies. They always kid Mitchell Byrd and me at the station; when 8:00 a.m. comes, we always take off for breakfast, in spite of the birds. Let's just say I'm convinced that I operate much more efficiently on a full stomach. So, when that magic hour arrived, and we had netted only about 25 individuals, the Ponds and Smiths headed for the breakfast table.

It was about 9:00 a.m. as we headed back for the station, and the weather had thickened and the clouds were dripping. We found that the BIC had given up for the day, and all the nets were furled. We headed back to the motel to await weather developments, and on the way the skies opened up and it really poured. That pretty well decided our course of action, and John and I scrounged up a bridge table and offered to give Nancy and Fatty-Pie a lesson. John and I played magnificently, but the girls were lucky and somehow managed to beat the daylights out of us. That afternoon Nancy and Fatty-Pie went shopping in the metropolis of Cape Charles while John and I watched the ball games.

The "happy-hour" that night was the occasion for the official change of command, which Mike accomplished simply by dropping an armfull of previous records and unused field sheets on my bed with a terse, "They're all yours." And so I shouldered that delightful, but sometimes nerve-wracking responsibility of "BIC for the week." I noted that for the day we had banded 32 birds of 15 species, with 3 repeats and no returns or foreign recoveries.

We had our evening meal at Paul's, as usual, and upon leaving were all pleased to discover that the wind had shifted to northwest and the temperature was dropping.

That night we all gathered in the Mitchell's room, and several of us showed slides that we had taken of birds. I particularly remember a great one Henry Bielstein showed of a group of Common and King Eiders, including an easily recognizable adult male of each species. Amazingly, it had been taken last winter from one of the bridge-tunnel islands!

As we trooped back to our rooms and beds, I'm sure each one of us was savoring that northwest wind, convinced that tomorrow would be a flight day.

Sunday, 8 October:

I awoke early, as usual, and when I slipped outside, I could feel a cold crispness that had been lacking the day before—and the stars winked brightly at me. I could hear no "peeps," but with the weather change, the birds must have moved!

We left the motel at 6:10 a.m., and as we drove down to the station I was faced with my first decision as BIC: there were eight of us on duty this morning, and how many of our 41 nets should I open? I decided to be a little conservative and not open the 4 beach nets until I had a feel for the bird movement last night.

The woods were quiet as we opened the nets, and although we were getting some early birds, by 7:00 I was sure it would not be a "big" day and ordered the beach nets opened. It turned out to be one of those great days when there were enough birds to keep us busy but not too many to keep us from studying individuals and taking pictures leisurely. There were a remarkable number of

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Sharpies overhead and in the woods—more, it seemed to me, than I ever remembered before. By 8 o'clock, when we left for breakfast, I had banded 4, and everyone was reporting the frustration of seeing them fly up out of the net pockets before they could get to them.

When we got back from breakfast I found that Dorothy Mitchell had banded two more Sharpies for me, rather than hold them, and the collecting boxes had a moderate assortment for me to work on. We caught our first Field Sparrow for the year, and the birds dribbled in steadily until we furled the nets at 4 p.m.

That evening at the "happy-hour" we tallied-up for the day and recorded 150 individuals of 31 species, with 16 repeats and no returns or foreign recoveries. But the truly outstanding item was the 14 Sharpies I had banded! Strangely enough, 13 of them were males, and I think I can conservatively say that at least 50 of them must have been seen in, or hitting, the nets during the day. Last year the most we banded on any one day was 2. Wow!

That night about 10 o'clock, I was watching TV and Fatty-Pie had already dozed off, when a tap came on the door. It was Fred Scott, letting me know he was available for tomorrow. He and his family had been visiting in Virginia Beach over the weekend when he diagnosed the favorable weather reports and decided they could get along without him.

So, as I dropped off to sleep, it was with the shining thought that tomorrow just had to be "it," because Fred Scott always shows up on the flight days.

Monday, 9 October:

When I slipped out of our room to "sniff the wind" at 5:15 a.m., Fred was there before me. We could hear a few "peeps" overhead, which Fred recognized as warblers, but disappointingly few. However, it seemed to me that the air was charged with expectancy (or was it I?), and over our coffee and buns I assured John and Nancy that today was gonna be that "big" day I had been promising them for 3 years.

We drove down to the station nine strong that morning, where we found three additional helpers waiting for us, having driven over that morning from Newport News. With good help and good weather predictions, I cast caution to the winds and passed the word to open all the nets!

I was a little chagrined when the nets didn't fill with a rush at full daylight (the usual pattern), but the volume increased steadily and I knew, regretfully, by 8 a.m. that I would have to forego my breakfast. At 9 o'clock the Myrtle Warblers started hitting the beach nets, and by 10 the net-tenders were bringing them back to the banding area 20 to 30 at a time.

At 11 a.m. I cast an apprehensive eye at the bulging collecting boxes, hurried down to the beach with a request for Fred to clear and furl those nets and return to headquarters to help with the banding. At 2 p.m. Fred and I were banding steadily and the collecting boxes were still almost full, so I straightened my aching back long enough to order the remaining open nets furled for the day.

John and Nancy Pond left shortly thereafter for their home in Bethesda, Maryland, delightfully satisfied, I suspect, with removing birds from the nets. Most of the others followed suit before long, and when we closed the station at 5 p.m., it was a weary group of three who headed back to the motel, with something over 900 birds banded for the day!

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A hot shower and a short "happy-hour" picked us up some, but I later remarked to Fatty-Pie that I was really so tired I couldn't properly appreciate Paul's salmon trout for dinner, and I still had a long evening ahead making the the number of each species total the number of birds banded. It was 10:30 p.m. before I finally succeeded, and as I leaned wearily back in my chair, I thought, "What a day!" We had banded 904 birds of 45 species, with no returns or foreign recoveries. I am still amazed at some of the totals that day; along with the not-unexpected 481 Myrtle Warblers were 20 Red-eyed Vireos, 9 Tennessee Warblers, 15 Parula Warblers, 83 Black-throated Blue Warblers, 49 American Redstarts, 16 Magnolia Warblers, 36 Yellowthroats, and 31 Swainson's Thrushes. We had one new species for the year, a Bewick's Wren, and only 4 Sharpies (I never thought the day would come when I said *only* 4 Sharpies!). Fred had banded 350 Myrtles and I had banded the remaining 554 birds.

As I stretched slowly out on the bed, I barely had time to guiltily subdue the traitorous thought that maybe it wasn't worth it to band 554 birds in one day—then I was out like a light.

Tuesday, 10 Ocober:

Not surprisingly, the alarm clock awoke me, for a change, at 5 a.m., for I still had yesterday's summary sheet to fill out. With that completed, I woke Fatty-Pie, and as we discussed our plans for the day over coffee and buns, I issued by first edict of the day: since we were but three strong, and the day following a flight day is usually a very productive one, we would open up only the 14 nets nearest the banding area to start with and play it by ear after that.

The wind was light from the northeast as we opened the nets in the gray dawn light, and we could hear a few chirps and rustlings in the woods. The birds were just beginning to hit the nets pretty good when a station wagon with five more helpers arrived at 7:30 a.m. from Newport News. I decided to open 23 more nets, all but the four on the Beach.

It proved to be a busy day; not hectic, as the preceding one, but about 10 a.m. the birds slowed rather abruptly, and we opened the remaining four nets on the beach. When it came time to furl the nets for the day, Fatty-Pie and I were alone, and I had banded just over 400 birds.

I asked her to close the nets "out front" and on the beach, and I would take those at the banding area and on the "Main Line." Arriving at the Main Line, I turned right and could see a bird about 200 yards down the lane, struggling in the net. It suddenly hit me, "That is a pretty big bird—I wonder if it could be . . ." With that I broke into what Fatty-Pie describes as "an increase in my normal, leisurely pace," but which I dignify as a "run." Anyhow, I arrived in time to triumphantly grasp a Sharpie. Imagine my surprise to discover that it was banded! "Probably one I banded earlier in the day," I thought as I headed back for the banding area, then realized the band was on the right leg! That meant it wasn't mine, but maybe Mike Mitchell's. I checked through the entire lits of bands used at Kiptopeke; it was not there. What I had was a foreign recovery of a Sharp-shinned Hawk!

Considering the rare incidence of any foreign recovery, one of a Sharpie just had to be tops! I could hardly wait for Fatty-Pie to get back from the beach so I could show her my prize. Would you believe it? She wasn't even excited, and proceeded to bring me rudely back to earth by inquiring, matter-of-factly, if the Main Line nets were still open!

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We were later than usual getting back to the motel and wondered if the Warfields, who had written they would arrive on Tuesday, were there yet. When they hadn't shown by 6:30 p.m., we proceeded to Cheriton and Paul's for our usual meal. They joined us at our table later, having stopped at Chincoteague that afternoon to birdwatch.

Ben helped me that night with the talley sheet. The daily totals proved to be 417 individuals of 40 species, with 18 repeats, 1 return, and 1 foreign recovery. Aside from our startling foreign recovery, the highlights were perhaps the 2 late Yellow-billed Cuckoos, 48 Golden-crowned Kinglets, 28 Rubycrowned Kinglets, and, of course, 203 Myrtle Warblers.

Wednesday, 11 October:

The weather predictions were for the wind to shift from northwest to southeast in the early morning, so when I slipped out to "sniff the weather," I was pleased to note the wind was still in the northwest. This meant that some birds should have moved during the night and our day would be interesting.

We opened all the nets at dawn, since I knew a group was coming over from Newport News. It was one of those "perfect" days, with a good rush of birds in the morning but still time enough for breakfast, photography and chatting. The wind did shift during the day to southeast, and the birds dwindled to nothing in the late afternoon.

That night when we tallied-up, the total reflected 192 birds of 26 species, with 17 repeats and no returns. Of the 192 banded, 99 were Myrtle Warblers.

Thursday, 12 October:

As we drove down to the station, our normal air of expectancy was completely missing that morning. What with the southwest wind all night, we just weren't anticipating much movement of migrants.

Silence greeted us as we opened the nets, and by breakfast time at 8 a.m., I had banded only a dozen birds. Things remained slow all day, with even the beach nets yielding only an occasional Myrtle.

That night when we prepared the summary, it proved to be our slowest day for the week, with only 53 birds banded of 16 species, and 17 repeats and no returns or foreign recoveries.

But the weather predictions noted *two* approaching cold fronts, one of which was due that night.

Friday, 13 October:

As I slipped out to test the weather, I wondered, idly, if there were anything to the old superstition of Friday the 13th. The cold front had obviously come through during the night since the wind was from the north. But the question was, had it come through early enough for a flight to occur?

We had the answer to that question shortly after the nets were opened. My hopes for another "big" day proved unfounded, and with added help from Norfolk and Hampton, it turned out to be a "comfortable" day.

There was even time for the BIC to make a few rounds of the net lanes, from one of which I returned with an Orange-crowned Warbler, only our second one for the fall operation.

After the nets were closed for the day, Fatty-Pie and I were the last to leave. As I climbed into the car and stepped on the starter, I was greeted by a "clunk!"

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I repeated the procedure with the same results, and realized that I had a dead battery! There was nothing to do but walk over to the home of the caretaker for the old Tourinns Motel, borrow his phone, and put in an SOS for help from a service station up the road. The prognosis was a dead cell which would probably cause further trouble. Since Kiptopeke is no place for the BIC to be caught without transportation, I bought a new battery. "Friday the 13th," I thought bitterly.

That night the "happy-hour" was much better attended, since the vanguard was arriving for the last big weekend, and we needed the big table at the back of Paul's Resaturant for our evening meal.

The summary that night proved easy to verify and reflected 154 birds of 21 species, with 19 repeats, 1 return, and no foreign recoveries.

Many thoughts crowded sleep from my mind as I went to bed. Tomorrow everyone would be there in anticipation of the break-up of the operation on Sunday. What sort of day would it be? The wind was presently in the north, but it was predicted to shift to southeast during the night. Would enough birds move before the shift to allow us to take advantage of all the help available tomorrow? I finally drifted off to sleep.

Saturday, 14 October:

The wind was light from the southeast as we headed for the station that morning, but what time it had shifted remained to be seen. As I moved down the Main Line opening nets in the half light, I could hear the woods stirring all around me, and I thought, with rising excitement, "They're definitely here!" I hurried back to the banding area to do some organizing, asking Fatty-Pie to be my traffic director and see, as nearly as possible, that the species were separated in the collecting boxes.

Then I eased down into the BIC's chair, prepared for a busy day of concentrated effort. I remember thinking, when I was ordering my supply of bands for this fall, that I was being foolishly optimistic in making sure I had 2000 of size O bands. About 10 a.m. I suddenly realized that I had only about 150 left of those 2000 and hastily asked Fred Scott and Mike Mitchell to use their bands on all Myrtle Warblers from then on.

I got a slight break from my busy routine when our 5-year-old grandson, Lewis, who had come over for the day with our son, Godfrey, came up to me about 11 a.m. and whispered in my ear, "Granddaddy, do you think it would be all right if Grandmama took me and Mark down on the beach to make a fort?" I replied very solemnly, "Lewis, it's been pretty clear that ever since you and your brother Mark showed up, your Grandmama paid no more attention to me. Now, that must mean that she loves you more than me, and that's bound to make it all right." He trotted off happily, and Fatty-Pie told me later that he was completely fascinated by my reply and assured her several times that morning, "Grandmama, we don't need to go back and help Granddaddy 'cause he said you loved me more than him!"

Everyone stayed busy. In fact, I ordered the nets closed at 3 p.m. so the banders could finish up at a decent hour. When we closed up the station we had banded over 750 birds!

The "happy-hour" that night was the biggest yet, and we had quite a crowd to make the last run up to Paul's for supper. I had my only repeat meal for the week, my favorite, crab imperial.

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There was plenty of help that night with the summary, and it turned out we had banded 754 birds of 37 species, with 19 repeats, 1 return, and no foreign recoveries. It was really Myrtle day, with 568 banded, but we were still getting an amazing variety of other warblers, and it appeared that the sparrows were just beginning to come through. Two White-crowned Sparrows were new for the year.

Sunday, 15 October:

When I slipped out the door early, I could feel no wind and wondered what had become of the predicted cold front during the night. This caused much tongue-wagging as we headed down to the station. When we arrived, we were amazed to find the wind there blowing steadily from the northwest at 20 m.p.h., gusting up to 35 m.p.h.

You can imagine what that did to our nets. All the net-tenders were soon frustrated from watching the birds bounce off those nets, belled out by the wind. By 11 a.m. the birds had tapered off to a trickle, and I ordered the station closed.

Everyone fell to, dismantling the nets and packing up their equipment. I'm always sure every year when we close that I'll never get all the nets, poles, collecting boxes, screen tent, chairs, table, etc. in our car, but between a big trunk, the back seat, and a car-top carrier, we made it again.

While we were eating lunch, I made a quick check on the day's and week's results. For the day, we had 167 birds of 23 species, with 19 repeats and no returns or foreign recoveries. For the week, we had banded an amazing 2790 birds of 61 species. As for me, the 27 Sharpies for the week was unbelievable, and the 2790 birds brought our total for the year up to a respectable 7331.

There was nothing left but to make farewells all around, climb into our cars, and head homeward. As we left the toll booth and headed south on the bridgetunnel, I thought back over the week. It was certainly the best, or perhaps I should say the most productive, week I had ever had at Kiptopeke.

As I relive it, my cup runneth over.

3009 Chesapeake Avenue, Hampton, Virginia 23661

A BAIRD'S SANDPIPER FROM RUSSELL COUNTY

RICHARD H. PEAKE, JR.

Baird's Sandpiper, *Erolia bairdii*, is infrequently recorded anywhere in Virginia, and thus a record from Southwest Virginia, apparently the second, appears noteworthy. According to J. J. Murray's *A Check-list of the Birds of Virginia*, Henry M. Stevenson recorded a Baird's Sandpiper "at Saltville, September 8, 1946, which was checked by James Tanner and others (*Raven*, 18, 37)." A second record, the first from Russell County, was obtained by Dwight E. Peake and Richard H. Peake on the afternoon of 2 August 1972 at Laurel Bed Lake.

After arriving at the lake, the Peakes found a number of shorebirds in the vicinity of the boat-launch ramp; among these were several "peep" sandpipers. One appeared larger than the Least, *Erolia minutilla*, and Semipalmated Sandpipers, *Ereunetes pusillus*, feeding near it; yet the bird in question did not

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possess the drooping bill generally characteristic of the Western Sandpiper, *Ereunetes mauri*. For a little over 25 minutes the observers studied this bird at distances varying from 100 to 10 feet through both a 20x scope and 7x35 binoculars in excellent light. Finally they had to move even closer to flush the bird.

Much smaller than the Pectoral Sandpipers, *Erolia melanotos*, and Spotted Sandpiper, *Actitis macularia*, present, this bird possessed a head and upper breast varying from gray-brown to buffy except for a dark stripe at the eye. Thus the bird's breast presented a "pectoral" effect, but the bird was obviously different from the Pectorals in the vicinity. Its legs were greenish-black, and it probed infrequently when forced into the water by the close approach of the observers. Its preference, however, was picking along the sandy portion of the flat on which it was found. After the "scaly" appearance of the bird's back had been noted from every possible angle, the observers were satisfied that they were viewing a Baird's Sandpiper, a species the writer had seen previously in Augusta County (*Raven*, 34:63, 1963).

When the bird had been observed thoroughly, the Peakes moved in to flush it. Though very reluctant to fly, the bird finally took wing uttering a drawn-out *kreet* quite different from the calls of the Least and Semipalmated Sandpipers. As the bird flew off, its scaly back was even more evident. Its wings were noticeably long with an inconspicuous stripe towards their rear edge.

> Clinch Valley College of the University of Virginia Wise,Virginia 24293

GOSHAWK SIGHTED AT ROANOKE

BILL J. OPENGARI

On an outing 31 December 1972 to Carvins Cove, a small lake near Roanoke, Virginia, Carole Massart, my wife, and I were observing the ducks on the lake and spotted a large gray hawk in a tree near the water. We had brought along a 60-power scope and could see the hawk's features plainly as we were about 300 yards away. A distinctive white line over the eye and a dark crown were evident. A dark eye line that widened at the cheek and the overall silvery gray appearance of the hawk with dark wings and back convinced us that the bird was a Goshawk, *Accipiter gentilis* (Linnaeus).

We observed the hawk about 45 minutes. The ducks on the lake were seemingly unconcerned with the hawk's presence until it flew to another tree, and then they became agitated and quacked excitedly. After the hawk lit in the tree, the ducks were again silent.

2735 Cedarhurst Avenue, N.W., Roanoke, Virginia 24012

SCISSOR-TAILED FLYCATCHER AT BACK BAY, VIRGINIA

WAVELL W. FOGLEMAN

After leaving the VSO field trip to Back Bay National Wildlife Refuge around 1:30 p.m. on 2 December 1972 I decided to drive through the lower part of Virginia Beach and Chesapeake to look for a shrike on the wires. I was astonished instead to find a Scissor-tailed Flycatcher, *Muscivorus forficata* (Gmelin), along Virginia Route 615 just a quarter of a mile south of Back Bay village.

It was 2:15 p.m. when I first saw the bird flycatching from a power line. Luckily, I had my camera on the seat and the weather was beautifully sunny. I pulled off the road and took several pictures from 25 to 30 feet away (Figure 1). The long tail was that of an immature, and the pink wing linings were quite evident as the bird flew about. After watching the bird for about 20 minutes, I went to inform the others still at the Refuge of the find. I passed David Green's car heading toward where the bird was and turned around to tell him to watch for it. By the time I caught him, we were near the place where the flycatcher was, so I went back with him. There was the bird on the same wire where I first saw him. David, his wife Caroline, and Hy and Zelda Silverman were thrilled to see the bird before it flew off west over a field.

I went back to Pungo and called the Refuge. Mitchell Byrd and others came to see the bird but missed it. As far as I know, no one else saw it that day or during the next week in spite of the effort made by many to track it down.

1025 Bolling Avenue, Norfolk, Virginia 23508

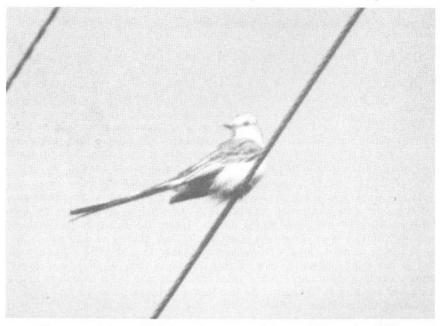


FIGURE 1. Scissor-tailed Flycatcher near Back Bay on 2 December 1972. Photo by Wavell W. Fogleman.

SNOW BUNTING IN AUGUSTA COUNTY

YULEE LARNER

On 28 February 1971 John F. Mehner discovered a flock of about 35 Snow Buntings, *Plectrophenax nivalis* (Linnaeus), at a pond on county route 693 near Middlebrook, Augusta County, Virginia. On 1 March this flock was observed at the same location by Ruth Snyder, Carol Pardee, Jean Mehler, and YuLee Larner. On 31 March the Mary Baldwin College ornithology class counted 3 still remaining.

Members of the Augusta Bird Club began watching the pond in February 1972, and after many trips out to the pond, one Snow Bunting was observed and photographed on 12 March by YuLee and Si Larner. The bird was still there on 13 March 1972 and was observed and photographed by Isabel Obenschain and Mozelle Henkel.

1020 West Beverley Street, Staunton, Virginia 24401

IN MEMORIAM

THE REV. WILLIAM B. MCILWAINE, JR.

February 6, 1885 – October 26, 1972

It is with a sense of reverence and of humility that I undertake to pen these few lines in remembrance of one of our older members. As one of the older surviving members who knew him so well, I was asked by our Editor to write a memorial notice on the Reverend William B. McIlwaine, Jr., of Dinwiddie County.

Dr. McIlwaine, or Preach as those of us who knew him intimately so affectionally called him, passed away on 26 October, 1972 after a long, useful life as a pastor of a number of Presbyterian churches in Virginia and North Carolina and a rather long period of retirement on his ancestral acres at "Sysonby," a charming 18th century home in northeast Dinwiddie County.

Many years ago while serving the church in Alexandria Dr. McIlwaine became intimately acquainted with Dr. H. C. Oberholser, then one of the foremost scientific ornithologists of the nation. Under this influence he developed certain habits of observation and study in the field pursuit of ornithology that gave him a genuine interest in birds, not purely as a scientific ornithologist but as one who thoroughly enjoyed just observing them as objects of beauty and as a part of nature. For many years after returning to his church in Petersburg and residing at "Sysonby," he had kept meticulous notes on his "Birds of Sysonby," the northeast portion of Dinwiddie County and adjacent Petersburg of which area "Sysonby" was the center. He had printed special pages to go into his series of loose-leaf notebooks, each bird species having a page or so, kept in strict A.O.U. order. Thus he recorded the bird life of his region as he found it.

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These pages are extremely interesting to peruse not merely for their statistical ornithological value but for his own personal comments which of themselves are of a high literary content. He had intended the publication of "Birds of Sysonby," in abstract form, in *The Raven*, but like so many of us never quite got around to preparing them for publication. Today these many loose-leaf volumes are a treasured possession of the family. I know because I used to pore over them during my frequent visits with Preach in his library.

During the years Preach had acquired a considerable library of ornithology and of other natural history subjects. In his library of many, many volumes other subjects were not neglected, for Preach was, in addition to being a first rate naturalist, an historian, specializing in local and family history. I have spent many pleasant hours with Preach in this splendid library. On one side of the doorway there were shelves full of all the classic ornithological books, including a complete set of the original Bent Life Histories. On the other side of the doorway was his collection of histories and Virginiana. As our conversation switched from subject to subject we would pull down volumes from both sides leaving books all over the chairs and tables-for Mrs. McIlwaine later to put back in their proper places. Here we would compare our latest bird notes, rehash articles in The Raven, and reminisce on past splendid days in the field. I recall vividly one winter afternoon as we sat discussing the ornithological literature reminding Preach that his name occurred on page 313 of Bent's Life Histories of North American Wood Warblers. He had never noticed this reference to a camping trip undertaken by Dr. J. J. Murray and himself in the Dismal Swamp in May 1932.

I have had the pleasure of Dr. McIlwaine's company on many a pleasant field trip to such places as Cobb Island, Hog Island, and many interesting places in Dinwiddie County. The VSO brought us together as I first met him aboard the old Kiptopeke ferry en route to the Cobb Island trip of 1952. From that point on I had been in constant contact with him as he was the closest kindred spirit to me among the rather far-flung VSO members in Southside Virginia. Preach had a rare sense of humor, and we shared a little joke between us over the years. Neither of us would eat any kind of fowl in any manner, and we often referred to people who did as freaks and oddities, knowing full well that we were the real odd people.

I have known Preach thus many years as a friend, a counselor, and as a fellow naturalist. It is one of the pleasures of belonging to an organization such as the VSO that brings kindred spirits together, and I am grateful to our society for bringing me to such a splendid person as William B. McIlwaine.

His younger son, Benjamin, is also a VSO member and an avid ornithologist. At present he is a medical student, and each year I have had the pleasure of joining him for a day or so of field ornithology. He has received a deep and abiding reverence and love of nature from his parents, and he may become one more of the number of brilliant field ornithologists recruited from the fields of medicine and theology.

The Rev. William B. McIlwaine has been a source of inspiration to me not only in the field of my chosen hobby but in all aspects of this mortal life. In short he was a great fellow.

THE 1973 VSO ANNUAL MEETING

ROBERT J. WATSON

The Mountain Lake Hotel, in Giles County, Virginia, served as the setting for the 1973 meeting of the Virginia Society of Ornithology, held on 1-3 June. Three local chapters, the Clinch Valley, New River Valley, and Roanoke Valley Bird Clubs, jointly acted as hosts. Attendance was high, with 174 persons registered. A new feature of the meeting was a boutique at which items of handicraft were offered for sale, the proceeds going to benefit the Society or its chapters.

The business meeting was held on Friday evening, 1 June. President Mitchell A. Byrd informed the members that the Board of Directors of the Society, at its last meeting, had taken two important actions, as follows:

1. Approved an annual award to groups or individuals who have furthered conservation, and decided that the first such award should go to the U. S. Coast Guard for its conscientious preservation of Osprey nests located on navigational aids; and

2. Authorized the production of printed field checklists, designed by Dr. Robert Ake, which are expected to be available shortly.

The President also announced that at the invitation of the Cape Henry Bird Club, the 1974 meeting will be held in the Norfolk area.

Mrs. Myriam Moore, chairman of the Nominating Committee, presented the following slate of nominees:

President: Dr. Mitchell A. Byrd, Williamsburg
Vice President: Dr. J. J. Murray, Jr., Charlottesville
Secretary: Robert J. Watson, Arlington
Treasurer: Mrs. Ruth A. Beck, Williamsburg
Editor: Frederic R. Scott, Richmond
Board of Directors, Class of 1976:
Bill J. Opengari, Roanoke
James W. Eike, Fairfax
Mrs. Sarah Cromer, Tazewell

These nominees were unanimously elected, there being no nominations from the floor.

Mr. Watson moved the approval of the following resolution, to be transmitted to Mrs. Paul S. Dulaney:

WHEREAS, Paul S. Dulaney, who passed away recently, had served the Virginia Society of Ornithology faithfully for many years, as a member, as President from 1961 to 1963, and as the Society's representative in the Conservation Council of Virginia from 1969 until his death; and

WHEREAS, Paul S. Dulaney had in other respects also labored long and hard to preserve the natural heritage of the Commonwealth of Virginia, having been the originator of the "wild rivers" program recently enacted by the Legislature of the State of Virginia, and having been active in organizing and operating the Conservation Council of Virginia, which has demonstrated its effectiveness;

NOW THEREFORE BE IT RESOLVED, that the Virginia Society of Ornithology mourns the untimely death of Mr. Dulaney, as a severe loss to the conservation movement in this State, and herewith tenders its sincere sympathies to his widow.

This motion was unanimously approved.

There being no other business, Dr. Byrd introduced Dr. Charles O. Handley, Jr., Curator of Mammals at the National Museum of Natural History, who discussed "Changes in the Avifauna of the Mountain Lake Region." The speaker described the topography of the area and summarized its ornithological history, which dates back to 1885. Of the 40 to 50 birds listed by early ornithologists, many are still abundant, such as the Carolina Junco, Least Flycatcher, and various warblers. Some that were once common are now rare (Yellow-bellied Sapsucker, Magnolia Warbler, Red-breasted Nuthatch) or entirely absent (Golden Eagle, Peregrine Falcon). On the other hand, the Rose-breasted Grosbeak, Scarlet Tanager, and Black-and-white Warbler have increased. During the last 10 or 15 years, there have been further changes; the Whip-poor-will is much scarcer, but the Raven and most hawks have become more numerous.

Briefings for the next day's field trips were presented by trip leaders, after which Dr. Don Messersmith showed slides of Australian birds. A film produced by Dr. Niko Tinbergen, illustrating aspects of the behavior of gulls, concluded the evening.

Dr. Byrd presided at the Saturday afternoon session, which began at 1:45 p.m. with a paper by Mr. Robert Hooper of the Southeastern Forest Experiment Station at Blacksburg, entitled "Nesting Ecology of the Common Raven in Virginia," During 1972 and 1973 Mr. Hooper located all active Raven nests within an area of 125 square miles between Clifton Forge and Lexington. Nearly all were sited on cliffs or ledges, protected by an overhang. Nesting of the Raven begins in February, and eggs are usually laid by 1 March. The density of nests within the study area compares favorably with that in England, where the Raven population is believed to be saturated; however, the average number of young fledged (1.7 per nest) is well below the English figure.

Aspects of the continuing study of the Osprey by the College of William and Mary were described by two graduate students from that institution. Mr. Jerry Via presented clear evidence that the shells of Osprey eggs in Virginia have become thinner in recent years. However, the phenomenon was less marked in 1972 than in 1970; perhaps the ban on DDT is beginning to show beneficial results. Mr. Gary L. Seek studied Osprey populations within a 1,500-squaremile region of Tidewater Virginia, where the numbers of the bird have declined sharply in the last 20 years. For 390 nests studied in 1972, nesting success (the average number of young fledged per active nest) was 0.83; this compares with 0.96 in 1970 and 0.69 in 1971. A figure of 1.2 is believed to be required to maintain a stable population.

For two decades, the Brooks Bird Club of West Virginia has conducted observations of autumn hawk migrations from the Peters Mountain fire tower, some 15 airline miles north of Mountain Lake. The results of this study were presented by Mr. George Hurley of St. Albans, West Virginia. The largest numbers of hawks have been seen between 16 and 25 September, with 20-23 September the best days. Winds of any direction seem to provide favorable conditions for migration. Some correlation has been attempted with data from ridges farther north. From Warm Springs, the birds apparently have a choice of using Peters Mountain or ridges to the east. When the weather is bad over the mountains, they seem to swing west towards Charleston. Mr. Hurley commented on the need for more observations and urged VSO members to undertake additional research.

"Wilderness in the Tri-City Area," by Mr. Robert D. Pacific, was a description of the Presquile National Wildlife Refuge, of which he is manager. This refuge is contained within an oxbow of the James River, which has been turned into an island as the result of a channel constructed across its base by the Corps of Engineers. It contains habitat of several types: woodland swamp, marsh, and farmland. Various methods are used to make the refuge more attractive to waterfowl and other birds. It is planned to provide nesting structures for Ospreys in the hope of inducing these birds to use the area. Presquile Refuge is open to the public by special arrangement but not on a general basis.

Presentation of additional slides by Dr. Donald Messersmith, these dealing with New Zealand, was followed by a short recess. The audience then reconvened to hear Mr. Richard N. Conner, of Virginia Polytechnic Institute and State University, evaluate the effects of clear-cutting upon woodpecker populations. Four study areas, cut at various times in the past, were examined. It was noted that the Downy and Hairy Woodpeckers were most common in the area that had been cut only last year. The flicker, on the other hand, was more abundant in a tract cut 5 years earlier. The Pileated and Red-bellied Woodpeckers were most common on a mature stand that had not been cut for 70 years.

Another presentation by a student from VPISU was relevant to an age in which most Americans live in urban areas. Mr. Vincent J. Lurid studied the bird populations of seven different residential areas in Blacksburg. The largest number of species of birds was found in areas of detached homes where the trees had attained considerable size and there was an abundance of shrubbery. An apartment complex showed the largest total bird population, but it consisted entirely of "trash" species (Starling, House Sparrow, Rock Dove), which made use of nooks and crannies in the buildings. In all study areas, the Starling and the House Sparrow accounted for a high proportion of the total.

"Bird Populations on Strip-mined Areas" was presented by Dr. Richard Peake of Clinch Valley College, in the absence of the coauthor, Dr. Philip Shelton. One region mined 19 years ago, containing a remnant of the original forest and a small pond fringed by alders, showed counts of 189, 230, and 106 birds per 100 acres, respectively, for the years 1971 through 1973. A bumper crop of rose hips, drawing large numbers of Robins and Cedar Waxwings, was responsible for the high 1971 and 1972 figures. A second area, stripped in 1971, has been reclaimed in "model" fashion by planting with grass and lespedeza but has little or no shrubbery. It showed a population of 25 birds per 100 acres in 1972 (mostly Horned Larks) and no birds at all the following year. A nearby stand of second-growth woodland, used for comparison, had a population of 108 birds per 100 acres.

Miss M. Kathleen Klimkiewicz, of Washington, D. C., described an atlas of the breeding birds of Montgomery County, Maryland, now in preparation; it is intended as a pilot project for a possible nationwide atlas (such as has already been done for the United Kingdom.) U. S. Geological Survey $7\frac{1}{2}$ minute contour maps are divided into grids approximately 10 kilometers square; the breeding birds in each grid, or block, are then mapped by teams of observers. So far the project has revealed six previously unknown breeding

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species in Montgomery County; however, the volume of labor required has been much greater than originally estimated. It has been found desirable to subdivide each block into quarters in order to plot the location data more precisely. The project has been extended to Howard County, and two other states, Massachusetts and Michigan, are initiating similar projects.

The afternoon program was brought to a close by Mr. Thomas H. Krakauer of Hollins College, who showed slides of the bird life of Bonaventure Island, Quebec. He drew special attention to the large and spectacular colony of Gannets on the island.

The principal speaker at the banquet was Dr. Maurice Brooks, formerly professor of biology at West Virginia University, who took his hearers through a vicarious tour of Highland County—"Virginia's own north country," he called it. This is a land of lofty ridges separated by fertile valleys, where two major rivers rise, the Potomac and the James. It is not a county of poverty and misery; the people live on the land and care for it. Wildflowers are abundant, with a prairie element detectable in the flora. Among mammals, particular interest attaches to the varying hare, or snowshoe rabbit. Forest growth is predominantly of northern types; red spruce, restricted to a few remnant stands, is slowly increasing. Interesting birds include the Golden-Crowned Kinglet, numerous warblers (notably the Mourning), Red Crossbill, and Raven. Spectacular hawk flights are on occasion observed from Paddy Knob and other locations in the county. The speaker concluded by pointing out that although Highland County has been losing population in recent years, some people have been moving in and finding a pleasant way of life there.

Following Dr. Brooke's speech, which drew prolonged and resounding applause, Dr. Byrd called on Mrs. James W. Eike, chairman of the Resolutions Committee. Resolutions prepared by Mrs. Eike and Mrs. Walter P. Smith, the other member of the committee, expressing appreciation to the many persons responsible for the success of the meeting, were approved by acclamation. Dr. Byrd then terminated the formal proceedings with a reminder that additional field trips were scheduled for the following morning.

The fascinating series of field trips on the mornings of 2 and 3 June were organized by a committee consisting of John W. Murray, chairman, C. O. Handley, Jr., Martha Roane, and G. Myron Shear. On the 2nd, five trips went out to (1) the Little Meadows area, led by C. O. Handley, Jr., (2) the Mountain Lake Biological Station and nearby Scenic Area, led by Martha Roane, (3) Sinking Creek and the Cascades of Little Stony Creek, led by Myron Shear, (4) the Poverty Hollow area, led by John Murray, and (5) Man's Bog, led by F. R. Scott. On 3 June the trips to Little Meadows, the Biological Station, and Poverty Creek were repeated, led by Scott, Bill Opengari, and John Murray, respectively.

In all, 95 species were reported by the various field parties, an excellent result considering the dates and the fact that no effort was made to cover all the habitats and altitudes in the annual meeting area. Among the more interesting observations were two occupied nests of the Brown Creeper, a pair of Red-breasted Nuthatches, and a singing male Blue-winged Warbler. It is expected that these observations will be published in more detail.

2636 Marcey Road, Arlington, Virginia 22207

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VSO FINANCIAL STATEMENT FOR 1972

Cash Balance 1 January 1972 General Fund Endowment Fund Publication Fund	850.00	\$3,521.09		
Cash Receipts				
Membership dues and subscriptions	2,253.00			
Gifts	87.50			
Sales of patches and decals	94.75			
Sales of publications				
Birds of Rockbridge County \$23.00				
Back issues of The Raven 8.75	31.75			
Interest	183.73	2,650.73		
Cash Disbursements				
The Raven	713.70			
Postage and mailing, Newsletter and <i>Raven</i>	121.70			
Treasurer	10 70			
Secretary				
Stationery				
Affiliations	167.00			
Refund	3.00	1,112.04		
Cash Balance 31 December 1972				
General Fund	1,568.33			
Endowment Fund				
Publication Fund	2,500.00	5,059.78		
Ru	лтн А. Веск, Treasurer			

CONSERVATION CORNER

RUSKIN S. FREER

With the adoption of the recent policy of giving priority to current issues of *The Raven* and filling in with the earlier issues later, this column resumes appearance. At the request of this writer and with the approval of VSO President Mitchell A. Byrd, the following have agreed to serve on the Conservation Committee and to assist in contributing to this column: Robert L. Ake, Norfolk; J. J. Murray, Jr., Charlottesville; Richard H. Peake, Jr., Wise; and Robert J. Watson, Arlington. The principal concern of this Committee has been environmental problems in Virginia.

Since Earth Day 1970 numerous organizations have sprung up and older organizations and publications with conservation interests have shifted priorities or even their names in response to the rapid and strong growth of environmental concerns. The word *environment* has largely supplanted the word *conservation*.

One of the newer organizations is the Environmental Defense Fund, 162 Old Town Road, East Setauket, New York 11733. It is made up of scientists and members of the legal profession who have been active in opposing the depredations of the Earth Scalpers—the developers, strip miners, stream channelizers, and the spreaders of concrete and tarmacadam.

The Environmental Defense Fund had three of its representatives at the hearing in Roanoke in March when a Norfolk group attempted to halt construction of the Gathright Dam above Covington. The Cape Henry Bird Club was one of the three intervenors in this suit. The Environmental Protection Agency gave this project their lowest rating, "environmentally unsatisfactory."

1158 Timberlake Drive, Lynchburg, Virginia 24502

NEWS AND NOTES

COMPILED BY F. R. SCOTT

BIRD NAME CHANGES. Sixteen years after the publication of the Fifth Edition of the Check-list of North American Birds, the A.O.U. Committee on Classification and Nomenclature has finally gotten around to publishing some changes in both scientific and English names of American birds ("Thirty-second Supplement to the American Ornithologists' Union Check-list of North American Birds," Auk, Vol. 90, pp. 411-419, April 1973). These changes are but part of those that will be required in the next edition of the Check-list and include only those that the Committee considered "almost noncontroversial." Some fanatic bird listers will dispute this last statement, however, as they find their life lists severely diminished in size by many "demotions" of birds formerly considered full species to subspecific rank.

Nevertheless, many of the changes have been obviously necessary for many years, and many current books were already reflecting some of these changes even before publication of the "Supplement." These name changes will be used in *The Raven*, beginning with this issue, as they will be in other ornithological periodicals. Those changes in English names of most concern to us are noted below.

Name changes due to mergers:

(1) The Blue Goose is considered a color morph of the Snow Goose, and the latter name will survive as the name for the full species, whereas the name Blue Goose is available for the dark morph.

(2) The Common Teal is considered a subspecies of the Green-winged Teal, the latter name surviving. The foreign race may be referred to as the Eurasian Green-winged Teal.

(3) The Yellow-shafted, Red-shafted, and Gilded Flickers are now combined as races into one species with the new name of Common Flicker.

(4) Audubon's and Myrtle Warblers are reduced to subspecies and combined under the new species name of Yellow-rumped Warbler.

(5) Baltimore and Bullock's Orioles are combined as subspecies into the enlarged species to be known as Northern Oriole.

(6) The Ipswich Sparrow is now considered a subspecies of the Savannah Sparrow, the latter name surviving for the full species.

(7) The Slate-colored, White-winged, and Oregon Juncos are reduced to subspecific rank and combined under the new species name of Dark-eyed Junco.

In items (3) through (7) above, the old specific names are available for the appropriate subspecies.

Name changes due to split of species:

The Traill's Flycatcher is split into two species based on the song types. The more southern and western bird with the *fitz-bew* song type becomes the Willow Flycatcher, whereas the more northern bird with the *fee-bee-o* song type becomes the Alder Flycatcher. The name Traill's Flycatcher, however, will still be used for this complex when specific identification is not possible, which will be most of the time.

Name changes due to addition of modifying words:

Northern Fulmer, Northern Shoveler, Red Knot, Gray Catbird, American Robin, Northern Parula Warbler, Common Yellowthroat.

Other changes:

(1) Leach's and Wilson's Petrels become, respectively, Leach's and Wilson's Storm-Petrels.

- (2) Common Egret becomes Great Egret.
- (3) The spelling of widgeon is changed to wigeon.
- (4) Common Scoter becomes Black Scoter.

(5) Pigeon Hawk and Sparrow Hawk become, respectively, Merlin and American Kestrel.

(6) Upland Plover becomes Upland Sandpiper.

Those wishing to know all the other changes, especially those in the scientific names, and the reasons for them should obtain a copy of the "Supplement." Limited numbers of reprints are available at \$1.25 each from the Treasurer of the A.O.U., Dr. Burt L. Monroe, Jr., Department of Biology, University of Louisville, Louisville, Kentucky 40208, or copies may be obtained from your nearest good library via a copying machine. Your local librarian can often arrange this for you even if they do not subscribe to *The Auk*.

RED-THROATED LOONS SUMMERING. A Red-throated Loon was seen almost daily between 29 June and 11 July 1972 in Swash Bay, Accomack County, Virginia, by Bill Williams. Two others were found at Chincoteague National Wildlife Refuge on 20 August 1972 by a VSO field trip (F. R. Scott and others). Although Common Loons are occasionally found in summer along the coast, such records of Red-throated Loons are exceptionally rare.

NEW YELLOW-CROWNED NIGHT HERON COLONY. A previously unknown colony of Yellow-crowned Night Herons was located about 1 mile up Bland Creek on the north side of the York River in western Gloucester County, Virginia. Mitchell A. Byrd and Gary Seek found 10 pairs nesting here on 2 April 1972, several of which were incubating.

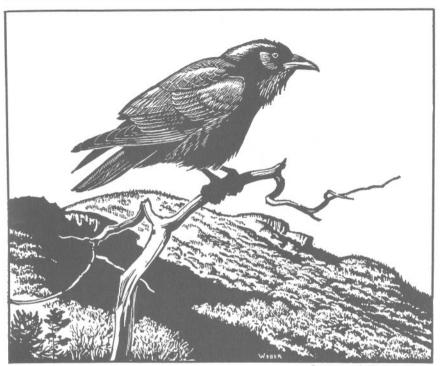
The Raven

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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), \$3.00 for active members, \$5.00 for sustaining members, \$10.00 for contributing members, \$100.00 for life members.

OFFICERS OF THE VSO

- *President:* MITCHELL A. BYRD, Department of Biology, College of William and Mary, Williamsburg, Virginia 23185.
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Editor Emeritus: J. J. MURRAY

Editor: F. R. SCOTT, 115 Kennondale Lane, Richmond, Virginia 23226.

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A NEST BOX PROJECT FOR BLUEBIRDS IN STAFFORD COUNTY, VIRGINIA

EDWIN T. MCKNIGHT

Introduction

This project was started in a modest way in 1966 when four nest boxes were put up in or on the edges of grassy fields and in an old orchard along the southwest side of the Potomac River, from a mile below the mouth of Aquia Creek to the southwest side of this creek a mile above its mouth. In this first year, one of the boxes fledged a brood of 5 young Eastern Bluebirds, Sialia sialis, and two others fledged Carolina Chickadees, Parus carolinensis. In the following year, two of the boxes fledged 15 young bluebirds and the other two fledged chickadees. The project was expanded in 1968 to 10 nest boxes and gradually to 28 boxes in 1972. The additional area over which these boxes were distributed included the valley of Accokeek Creek (between Aquia and Potomac Creeks) below Brooke, the upland ridge between Accokeek and Potomac Creeks, and particularly the Marlborough Point area between Accokeek Creek and the Potomac River. As the project expanded, chickadees were often the first occupants of new boxes, but they were gradually displaced by bluebirds. In 1972, all but four of the boxes were occupied at some time, though not always successfully, by at least 22 pairs of bluebirds, and about 94 young were fledged.

Because the project area lies at some distance from my home (120 miles round trip in 1972), monitoring of the boxes has been at intervals of generally one to two weeks, the shorter intervals in more recent years. But the interval has varied irregularly with my absences from home. For any extended absences, the monitoring task has generally been taken over by Mr. and Mrs. A. A. Baker, for whose collaboration I am greatly indebted. David B. Stewart has made some inspections. Mickey Law and the Rev. Jacob Miller have made inspections of nests on their properties for me. I am also indebted to the many property owners in the project area for their indulgence and interest.

The primary purpose of the project has been to build up a breeding population of bluebirds rather than as a detailed study of their breeding biology. The distance to the project area and the long monitoring interval have been too great to have encouraged any banding studies. In renestings, for example, the assumption that generally the same pair of birds is involved is only a reasonable surmise in the absence of banding, but may be suspect in specific instances. Yet some phases of the breeding biology are clearly indicated by the project and are worth recording. In a study of this type, an interpretation of what has transpired at the nest since the last visit is an essential part of the picture, particularly if the nest has become empty in the meantime. The incubation and nestling calendars are fundamental to any interpretation. During the course of the project, the incubation period has been determined with reasonable accuracy. For the nestling calendar, I am greatly indebted to David B. Stewart, who has carried on a simultaneous nest box project in Montgomery County, Maryland. In the course of this project early in 1970, he made daily examinations of a brood of bluebirds in his yard, recording their development from the day of hatching to the day of fledging as determined from a visual inspection from above without otherwise disturbing the brood. These observations have given the criteria for

ageing the nestlings with a confidence of ± 1 day and have proven invaluable in my project.

Nest Boxes

The nest boxes used are of my own design, but the dimensions are nearly those given by Zeleny (1969)— a 35% by 4-inch floor and a $1\frac{1}{2}$ -inch diameter entrance hole whose sill is 6 inches above the floor. The construction material is $\frac{3}{4}$ -inch pine board, and the front-sloping top is hinged on its under side at the back to allow inspection of nests. The box is painted "light stone," a light blue-gray color that blends well with old fence posts. The boxes are mounted on the tops of fence posts, on 2-by-2-inch poles, or more recently, in an attempt to cut down snake predation, on $\frac{1}{2}$ -inch galvanized pipe which is $\frac{7}{8}$ -inch in external diameter. The height of the entrance hole above the ground ranges from $\frac{41}{2}$ to 7 feet, the higher mounts generally being on the posts of fences that confine livestock. The boxes have been equally acceptable, and successful, regardless of direction in which they face. They are placed either in flat terrain or, in accordance with a suggestion of Zeleny, toward the tops of slopes where the terrain is rolling. The two closest boxes, which face and are in sight of each other at 550 feet, have been simultaneously occupied by bluebirds.

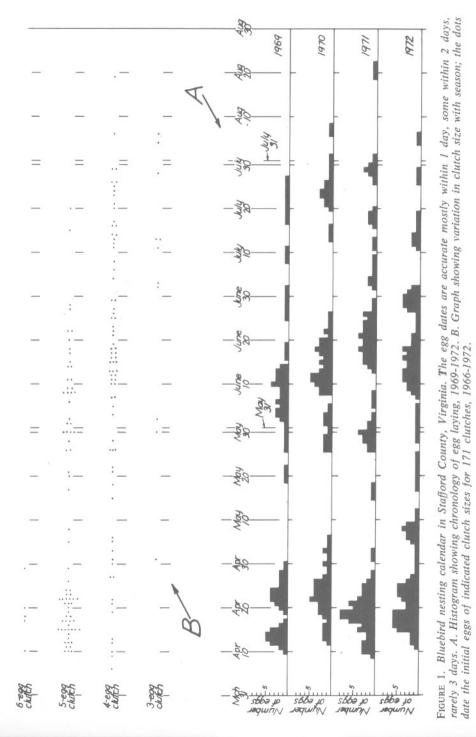
Nesting Calendar

Some bluebirds are present in the project area throughout the winter, but whether or not these constitute a large part of the breeding population is not known. Nests are started in late March or early April. The species is commonly three-brooded in the project area, more successfully in some years than in others; and in 1968, one pair even attempted four nestings. This pair was plagued by infertility so that the fledged broods consisted of 1, 4, and 2 young, and the fourth clutch was completely infertile. A particularly favorable year for multiple broods was 1970, when 6 of 18 pairs attempted third broods, 4 of them successfully. Figure 1A, in which the number of eggs laid on a given day is plotted against the calendar for the four years from 1969 to 1972, shows particularly well the three cycles of egg laying in 1970: 12 April to 6 May, 26 May to 26 June, and 13 July to 8 August. In other years the first cycle is plain and the second cycle fairly evident, but the third cycle has been interrupted by predation that has built up during the earlier cycles, eliminating or throwing the third cycle out of phase. The earliest ascertained date of egg-laying is 6 April (1968, the infertile pair), and the latest date is about 22 August (1971) as extrapolated back from estimated age of the young at 5 days. The latter nesting culminated successfully with the fledging of a brood of 4 on the phenomenally late date of 23 September.

Nest and Eggs

The nest, built entirely by the female, is generally made from thin dried grass stems, but a few have been made almost entirely from the needles of the Virginia, loblolly, or white pine. Only rarely are a few chicken feathers incorporated. Their absence in general distinguishes the bluebird nests from those of the House Sparrow, *Passer domesticus*, some of whose nests in the early stages resemble bluebird nests except for their proneness toward the use of feathers.

The intensity of blue in the bluebird egg color varies from nest to nest, and some eggs may be noticeably pale. However, the rare variant of pure white



eggs is so striking that a set of white eggs is instantly noticeable. Bent (1949) quotes the percentage of white eggs from studies in Illinois and Tennessee as 5.48 and 9.1%, respectively. The incidence is much rarer in my Virginia area. Only one clutch of 5 in a total of 782 eggs (0.64%) has been white. This clutch was lost, probably to a black snake, just at hatching time, and the female probably was lost at the same time. Had she survived, the percentage of white eggs should have been greater.

The clutch size has ranged from 3 to 6, though most clutches contain 4 or 5 eggs. Of 171 clutches (1966-1972, inclusive), 6.5% contained 3 eggs, 45.0% 4 eggs, 45.0% 5 eggs, and 3.5% 6 eggs, for an overall average of 4.45. This compares with 4.40 given by Peakall (1970) for the four states of Virginia, the Carolinas, and Georgia (86 clutches). The average clutch size decreases during the course of the nesting season (Figure 1B). Thus, five of the six 6-egg sets were started in April, whereas ten of the eleven 3-egg sets were started 30 May or later. Five-egg sets greatly predominate over 4-egg sets in the first egg-laying cycle during April, the two are approximately equal in number from 26 May to 22 June, and 4-egg sets greatly predominate later in the season when third nestings or replacement nestings following predation are chiefly represented.

Incubation

So far as my observations go, incubation has been entirely by the female with one notable exception that was due to unusual circumstances. The second nesting of the only pair using the boxes in 1966 came during a period of intense heat. The nest box was not as well insulated as it was in later years, and in consequence, the 6 eggs were addled at an early stage of incubation. The female was incubating on 3 and 16 July. My next inspection was delayed until 6 August, at which time the female had given up, but the male was still trying to hatch the set. He would spend several minutes in the box, then a short period outside, then another turn in the box, exactly as in normal incubation. I terminated the nesting by removing the nest and breaking the eggs (some of which exploded when they were cracked).

During incubation, the female is very tolerant of human disturbance. Usually she flushes as the box is approached, and both she and the male scold when the box is opened. Some pairs vigorously dive-bomb, though without hitting the intruder. But when the box is closed, the female reenters in a short time with little or no show of nervousness, sometimes with a preliminary peek or two into the box but at other times with no hesitation whatsoever. On cool mornings the female may refuse to flush but calmly looks one in the eye at close range. This causes considerable delay in making an inspection tour when several females are similarly disposed. I have never had a female flush through the open top of the box (as the Carolina Chickadee commonly does), but then I have never tested the bluebird's endurance by further agitating her. Usually a wait of 10 to 20 minutes will find her leaving the nest for a normal rest period.

The incubation period is generally 14 days. Although the monitoring is not at close-enough intervals to have established this in any specific instance, the figure is statistically sound (11 of 13 determinations). Assuming that eggs are laid at one-day intervals and incubation begins on the last, or next to last, day of laying, there are enough extrapolations from completed or partial egg sets to just-hatched or hatching young to establish the interval. In instances where most of the eggs have hatched 13 days after the last egg was laid, there

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has generally been one egg that was not hatched until the next inspection. In these instances, incubation presumably began on the next-to-last day of egg laying, and the last egg to hatch presumably represents the last egg laid, hatching at 14 days. In two instances the apparent interval was 15 days. For a few periods longer than 15 days, uncertainty as to when the incubation actually began, in the absence of close monitoring, makes any such intervals of no true significance. Under a similar monitoring pattern but with fewer definite determinations, the 14-day incubation period has been confirmed by David B. Stewart in Montgomery County, Maryland, with one possible exception; in 1969, a nest with no eggs on 3 May held 4 eggs on 10 May, and all hatched on 20 May. Although the time of inspection was not recorded on 3 May, it was probably no earlier than midmorning; and unless an egg was laid shortly after the inspection (and on each of the 3 succeeding days), the incubation interval indicated in this instance was 13 days.

Infertility

The failure of one egg of a clutch to hatch is common. When such eggs are opened, they are generally found to be infertile, though a few have very small embryos. A related and equally common phenomenon is an unexplained loss, usually of one unit but sometimes two or three, at hatching time; at the first inspection thereafter, there are one (to three) less callow young than there were eggs and no sterile eggs left in the nest. Whether the female is able to identify a sterile egg and may throw it out at hatching time, or whether a hatchling dies and is promptly thrown out, are the alternatives, but it would take a much closer monitoring to solve this mystery. Occurrence of the hatching-time loss at the nests of pairs known to be relatively infertile suggests that the discarding of sterile eggs may be the explanation. Generally, the young that are present at the first inspection survive and fledge, and although an occasional one is lost, particularly in the first week, such loss is far less common than the unexplained loss at hatching time. Dead young are removed by the parents except in the final days when they are well feathered (two instances).

In addition to the widespread random sterility of single (or exceptionally 2 or 3) eggs of a clutch and the possibly related hatching-time loss, a few bluebird pairs have been relatively infertile. The outstanding example is the pair already mentioned that occupied Box 3 in the three-years 1968-1970. In 1968, 7 young were hatched from a total of 17 eggs (four clutches); in 1969, 2 young from 8 eggs (a third clutch of 4 was destroyed, probably by a chipmunk); and in 1970, 7 young from 12 eggs (three clutches). Two other infertile pairs were recognized in 1970. Aside from these three pairs, sterility and hatching-time loss have been no great barriers to reproduction. The total number of pairs using or attempting to use the boxes in 1968-1972, inclusive, amounted to 10, 13, 17, 18, and 22 pairs, respectively, though owing to the vagaries of total reproduction success, not all of these pairs were of demonstrable fertility. Discounting the three infertile pairs, the random, widely distributed, and mostly single-egg type of infertility, including early embryo and hatching-time losses, have amounted to 6.8% in 544 eggs (121 clutches) over the total project from 1966 to 1972.

Nestling Stage

Both parents are equally industrious in feeding the young and cleaning the nest. The nestling period ranges from 15 to 18 days and is most commonly

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17 days. No successful fledging at 14 or fewer days has been proved, and disappearance of young from the nest at these ages probably means predation by a snake. At 16 days and older, maiden flight of the young from the entrance hole is strong, commonly ascending, and can reach distances of 200 to 300 feet if necessary to reach suitable trees, though the first landing attempt is commonly clumsy and may end up in a flutter nearly or quite to the ground. The maiden flight is noticeably slower than that of the adults, and when it is made over open terrain, the parents may join in a weaving, confusing pattern, evidently designed to disrupt any predation attempt by grackles or jays. I have seen 4 young fledge safely to bordering trees from a box in a pasture that was overrun with foraging grackles.

The abandoned nest of a successful brood of 4 or more is flattened by the crowding of the young in their last few days as nestlings. The pin-feather scales ("dandruff") that are shed from the wings and tail at an age of 13 to 14 days are in a stratum a short distance below the top of the nest material where they have either filtered down, or more probably, been buried by trampling of nest material from the edges of the nest cup during the last nestling days. If these scales are not present, then the young did not reach an age of 13 days. Further, the nest is not cleaned by the parents during the fledging, and although the young commonly leave at fairly short intervals between successive launchings, the last young may linger long enough to deposit one to four fecal pellets which are normally untrampled. All of these characteristics of a successful nest are important in judging snake predation, to which the nestlings are particularly vulnerable.

The interval between fledging of a brood and the first egg of a following nesting averages about 20 days between the first and second nestings (range 8-38 in 39 cases) and 11 days between later nestings (range 8-18 in 12 cases, one of them involving a fourth nesting). Where I have felt reasonably sure that the same parents were involved, the shortest total intervals for three broods have been 10 days between the first and second and 8 days between the second and third (Box 27, 1972). Where the interval has been shorter in a few instances, there has been a presumption that a change of parents was involved. However, Thomas (1946, p. 157), dealing with banded birds where the identity of the parents was unequivocal, has shown that the interval can be as low as 6 and 2 days, though in the latter instance only one young was fledged from the brood, and a move to a closely adjacent box was made for the new nest.

The greatest number of young fledged from a box in a year and presumably by the same parents has been 13, from three broods (two instances).

Predation

The loss to snakes has been impressive. Based on the total number of eggs laid, the percentage loss amounted to 26% in 1968, 26 in 1969, 23 in 1970, 31 in 1971, and 23 in 1972.¹ As the problem became more and more obvious over the years, successive steps were taken to forestall the snakes; 20 inches of sheet aluminum was encased on many of the supporting posts or poles, some boxes were placed on $\frac{1}{2}$ -inch galvanized pipe, the sheet metal coatings and pipes were in later years covered with automobile cup grease, and (in 1972) the coating cup grease was mixed with a large proportion of creosote oil. None of these attempted solutions have been more than moderately effective, if at all.

¹ Loss to snakes in 1973 has been 37%.

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In 1972, four broods were taken after the snakes had climbed through the grease-creosote mixture. Use of the grease mixtures in the later years has amply confirmed earlier surmises that snakes were the culprits where the eggs or young disappeared before term from nests that were in no way disarranged. If close record is not kept of the development of the young and criteria are not used for judging a successful fledging, many cases of snake predation could be easily overlooked. The grease mixtures, of course, furnish unmistakable clues in the tracks left on the pole, on the top and sides of the box, and in the smearing of grease around the entrance hole and inside the box which the snake has obviously entered. Before use of the greases, only rarely was a clue left at the box in the form of a smeared fecal pellet in the nest that might be hard to interpret.

Certain boxes have been raided repeatedly by snakes in spite of the successive handicaps put in their way, suggesting that these snakes build up a memory for likely food sources. Still, at some boxes with particularly bad histories of snake predation, some bluebird broods have survived to fledging. Although both the eggs and young bluebirds are taken, the commonest losses come after the young are a week or so old. In 1971, 13 nestings were lost, nine of them definitely in the nestling stage totaling 35 young, three just before or just after hatching totaling 12 young, and one in the egg stage totaling 4 eggs; and in 1972, nine of the 10 nesting losses were in the nestling stage. On three occasions, black snakes have been found in the boxes, and the common sighting of this species on the roads and in the fields suggests that it is the main culprit.

House Sparrows have been serious handicaps in some parts of the nest box area, particularly on Marlborough Point. To obtain nesting sites, they will move in and destroy a bluebird nesting at any stage. Although such instances have been relatively few in the project area, sparrows have once destroyed eggs and, on three occasions, very small young. Observations in David Stewart's nest box area in Montgomery County, Maryland, show that the sparrows will attack young bluebirds in the box as late as age 14 days, pulling out the flight pinfeathers in the wings but more systematically pecking at the head until the young are killed. The sparrows then throw out the dead young or may build a nest over one or more carcasses. The chief detriment from sparrows in my Stafford County area, however, has come from their monopolizing certain nest boxes over a large part of the breeding season. Most of them have proved sensitive to repeated weekly ejections and eventually give up. As they have spent a lot of their nesting time at these boxes without being allowed to reproduce, the population may eventually be reduced. In a few areas where single pairs were originally present, they have already been eliminated.

An unexpected predator was the Little Black Ant, *Monomorium minimum*, which destroyed five broods in three years (1969-1971). This ant builds its nests commonly in rotting or faulty wood and hence may be present in fence posts on which nest boxes are placed. However, one brood was destroyed from a box on a fresh 2-by-2 inch pole. The individual ants are so tiny as to be barely noticeable, but any food item that they discover is soon covered by a black horde of their bodies. The destruction of bluebird nestlings comes just at hatching time when the ants invade the nest and consume the callow young. They also enter and consume the contents of any pipped eggs. The parent bluebirds are unable to cope with the problem and abandon the nest promptly, so that some of the eggs may be left unhatched but with fully developed young inside. Where a nest box has been victimized, later nestings can be protected

by spraying the top of the supporting post with a pyrethrum insecticide just before expected hatching dates. I am indebted to Dr. David Smith of the Systematic Entomology Laboratory of the U. S. Department of Agriculture for identification of this ant species.

Another species of ant, brown and considerably larger than the Little Black Ant, commonly invades the boxes and builds its nest on the floor of the box under the bluebird nest, but I have not as yet found this ant attacking the bluebirds. Their nests are not generally suspected until the old bluebird nest is thrown out.

Many of the bluebird broods have been parasitized by the blowfly Protocalliphora. This fly, somewhat larger than a house fly, lays its eggs in the bluebird nest, and the bloodsucking maggots that hatch hide in the nest material and feed on the nestling birds. At the end of their cycle, the maggots burrow to the bottom of the nest and pupate. The puparia are corrugated gravish brown capsules averaging perhaps a quarter of an inch long and are revealed when the nest is thrown out. The equilibrium that has evolved between the bluebird and this parasite is such that only rarely do the bluebird nestlings succumb. In my project area, the death of only a single nestling has been ascribed to this pest—a special case in which an infertile pair of bluebirds had produced only one young which apparently was not able to cope with the maggot infestation that would normally have been spread among 4 or 5 young. The flies emerging from puparia collected from this nest were reported by Dr. Curtis W. Sabrosky, of the U. S. National Museum, to be Protocalliphora sialia. Puparia from a heavily infested chickadee nest that same year (1969) yielded a different and, at that time, undescribed species of Protocalliphora, according to Dr. Sabrosky. The amount of parasitism varies from year to year and was particularly severe in 1969. It was serious in one brood in 1971 but was very light in 1972.

Protocalliphora maggots are, in turn, heavily parasitized by a tiny wasp which finishes its cycle inside the fly puparia and eventually emerges as the adult wasp. In this instance, the puparia cases show a tiny round hole where the wasp has emerged instead of the larger hole that would have been made by an emerging fly. Because the incidence of wasp parasitism on the maggots is believed to be greater for bluebird nests in open situations such as the nest box locations in Stafford County, I have been very careful not to harm the puparia when the old bluebird nests are thrown out.

There has been no trouble in the project area from House Wrens, *Troglodytes* aedon, or Starlings, *Sturnus vulgaris*, which have proved to be very troublesome in some other areas. Starlings are largely controlled by the diameter of the entrance hole, which is too small for them. Other predators (chipmunk and possibly raccoon and cat) have played only a minor role in nesting losses.

Percentage Success

Only the more important and recurring factors that account for nesting losses have been discussed. When all of the loss factors are included, the percentage success of the project in terms of young fledged from eggs laid has been remarkably consistent over the five years from 1968 to 1972, inclusive—51, 53, 53, 54, and 47%, respectively. If the success is expressed in terms of fledged broods in comparison to total completed sets of eggs, even where a lone fledgling is classed as a fledged brood (Peakall, 1970, p. 251), then the percentage success over the 5 years has been 58, 57, 68, 56, and 55%, respectively.

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Expressed in terms of young fledged from the total number of bluebird pairs participating and without regard to the success or failure of individual pairs, the average young per pair in the five years was 4.3, 5.2, 4.7, 5.4, and 4.3, respectively. Several nonrecurring factors cut down on the production in 1972, but hurricane *Agnes* was not one of them.

Conclusions

Bluebirds will take readily to properly designed nest boxes placed in favorable locations in areas where there is a residual population. However, I believe that this, alone, will not insure an increase in their population and may, in some instances, even hasten their local extirpation if effective steps are not taken to combat the snake and House Sparrow problems.

Where snakes are as abundant as in Stafford County, a certain number of nests are going to be found by their random foraging. That number should be greater where the nesting is concentrated in nest boxes than under the primeval conditions under which the bluebird's nesting habits were evolved. The bluebird builds nests wherever it can find suitable cavities from 3 to 30 feet above the ground (Forbush, 1929, p. 419). As a terrestrial predator, the snake should find more nests at the lower than at higher elevations, and nests in boxes at $4\frac{1}{2}$ to 7 feet should be proportionately more vulnerable than nests placed at all heights under natural conditions. That the snake builds up a memory, once a productive box has been found, is suggested by the history of some of the boxes. Thus, at one box, a snake got the first brood (and little black ants got the second) in 1970, and snakes got all three broods in 1971; the box was abandoned to chickadees (successful) in 1972. At another box, snakes got the single bluebird nestings (eggs or young) in each of three consecutive years, 1970-1972, and also took chickadee nestings in the latter two years. On the other hand, other boxes have had half of the nestings taken over the years but have fledged the other half, perhaps in part owing to combative steps taken that were at least temporarily effective.

Under the former natural condition the bluebird probably moved its nest site when snakes took a nesting. But nest sites are no longer plentiful, and after a short period the bird now usually renests in the same pillaged nest box. The nest box thus becomes an attractive hazard. Unless effective steps can be worked out for frustrating the snake, the total effect might prove to be disastrous, for conceivably, in time, snakes will find all of the existing nest boxes. I shall continue next year with a variant of the creosote deterrent. Metal cones should solve the problem but are impractical at the current stage of my project because of the great variation in the type of supporting poles to which the cones would have to be individually fitted. This solution should be kept in mind, however, by anyone contemplating initiation of a new nest box project.

The House Sparrow problem is well enough known so that it needs only a minimum of discussion here. Any buildup of the sparrow population through nesting in the nest boxes only increases the pressure on the bluebirds and will eventually displace them. Any enticement of bluebirds into attractive nest boxes from which they will be ejected by sparrows is a disservice that uses up part of their vital nesting season. Where a large sparrow population is already established, it is futile to attempt a nest box project for bluebirds. Under such conditions, the bluebird, if it survives at all, will have to occupy marginal nesting sites that are not attractive to the sparrow or Starling.

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Summary

Bluebirds take readily to nest boxes that are properly designed and located. In my project area in Stafford County, they are commonly three-brooded and in one instance, four-brooded. The earliest date of egg-laying is 6 April, and the latest date about 22 August; a clutch completed on the latter date fledged young on 23 September 1971. Clutch size is 3 to 6, usually 4 or 5, decreasing gradually during the nesting period, and averages 4.45 (171 clutches). Incidence of pure white eggs is very low. Incubation period is usually 14 days, sometimes 15 or 13 days. A few pairs are relatively infertile. The nestling period is 15 to 18 days, most commonly 17. The interval between fledging of the first brood and the first egg of the second nesting averages 20 days, and between later nestings, 11 days. The loss to snakes, chiefly in the nestling stage, has amounted to 23-31% in a five-year period. House Sparrows have destroyed four nestings but interfere in the project chiefly through monopolization of nest boxes. Little Black Ants destroyed five broods at the hatching stage in three of the years. It is concluded that a nest box project that does not consider and combat the snake and House Sparrow problems is futile and may do more harm than good.

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5038 Park Place, Washington, D. C. 20016

BANDING RESULTS AT KIPTOPEKE BEACH IN 1972

F. R. SCOTT

The Virginia Society of Ornithology sponsored the tenth consecutive year of its fall banding station at Kiptopeke Beach from 2 September to 15 October 1972. As shown in Table 1, most measurements of the operation declined from 1971, including new birds trapped, total species, total net-hours, and trapping efficiency, the last item dropping from 72 to 62 new birds per 100 net-hours. There were 546 repeats, 14 returns, and 2 foreign retraps.

Three things obviously contributed to the decline in banding results. First, the station was in operation only 44 days versus the 51 days of more recent years; second, it closed 9 days earlier than in 1971, thereby missing some big flights that occurred later; and last, the Chesapeake Bay Bridge-Tunnel was knocked out of commission on 20 September for about two weeks, thereby depriving the banders-in-charge of assistants from nearby Norfolk and Hampton

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areas. As a result of this last event, net-hours had to be reduced to a level manageable by a smaller work force. At this station peak trapping efficiency is attained by the ability to take full advantage of the big flights that might occur on the average of once every week or so. This means having enough assistance on hand so that a maximum number of nets can be kept open.

The weather was probably as reasonable as one could expect. Rainfall was above average for the period, forcing frequent closing of the nets, but nets were closed all day only once (6 October). Compensating for this, there was more than the normal frontal activity, with nine cold fronts moving through during the six weeks. High winds were frequently a problem, forcing closure of exposed nets or rendering them totally ineffective. On 21 September, for example, nearby Norfolk recorded sustained winds of 45 m.p.h. as a low-pressure area moved northward up the coast.

Most species totals were lower than in 1971. This was particularly true of the winter residents, such as the Hermit Thrush, kinglets, and the various winter fringillids, probably resulting from the earlier station closing in 1972. Yellowrumped Warbler totals, in fact, dropped from 3236 in 1971 to 1637 this year. Some other decreases included Swainson's Thrush, from 140 (1971) down to 108 (1972): Grav-cheeked Thrush, 218 to 149; Red-eyed Vireo, 158 to 118; and Blackpoll Warbler, 97 to 34. Note that for the second year in a row the Gray-cheeked outnumbered the Swainson's Thrush. It will be interesting to observe whether this seeming aberration develops into a long-term trend, or whether it was merely a coincidence caused both years by less favorable banding conditions during the height of the Swainson's Thrush migration in late September and more suitable banding conditions during early October, the normal height of the Grav-cheek migration. Increases in species totals included Sharp-shinned Hawk, 22 (1971) to 45 (1972), a record high; Traill's Flycatcher, 27 to 36; Least Flycatcher, 7 to 18; Red-breasted Nuthatch, 6 to 34; Black-and-white Warbler, 139 to 176; Tennessee Warbler, 15 to 28; Nashville Warbler, 17 to 34, another record high; and American Redstart, 1226 to 1706. The hawks were caught without benefit of special net sizes or net sets, and only a small fraction of those that hit the nets were actually caught and banded.

Peak flight days occurred on 10 September (325 birds trapped), 23 September (468), 1 October (367), 9 October (904), and 14 October (754). Forced closing of the nets, because of weather conditions or inadequate help, occurred on several other flight days, notably 5, 15, and 20 September. All of these flights were associated with the passages of cold fronts. On the flights of 9 and 14 October, Yellow-rumped Warblers made up the bulk of the birds trapped and comprised 53% and 75%, respectively, of the totals. The only other time one species made up such a large proportion of a big flight was on 10 September when the 170 American Redstarts trapped comprised 52% of the day's total. Unusual birds for this station included a Bewick's Wren on 9 October (third station record-W. P. Smith), a Warbling Vireo on 22 September (fourth station record-Mrs. H. M. Church), a Prothonotary Warbler on 6 September (fourth station record-Mrs. Betty Lancaster), and a Lark Sparrow on 13 September (second station record—F. R. Scott). The only species not previously trapped here was a Marsh Hawk on 3 October. The two foreign retraps were an American Redstart (1270-63620) banded at Amityville, New York, 23 September 1972 by A. J. Lauro and retrapped here 4 October by Mr. and Mrs. Sydney Mitchell and a Sharp-shinned Hawk (762-53645) banded at Cape May,

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New Jersey, 8 October 1972 by W. S. Clark and retrapped here 10 October by W. P. Smith.

Station operation in 1972 was essentially the same as in prior years. Up to 41 mist nets were used, and only minor changes were made in net locations. Weather and work load permitting, nets were opened before dawn and furled in mid or late afternoon, although on a few very slow days the nets were closed in the early afternoon. In general, one licensed bander was in charge of the station for a week at a time. These were Mrs. Herbert M. Church, Jr., C. W. Hacker, Mrs. Betty Lancaster, Mr. and Mrs. Sydney Mitchell, F. R. Scott, and W. P. Smith. Backing up these were 71 other banders and assistants, without whose help the station would have shown much poorer results. The final editing and tabulation of the field records were performed by W. P. Smith.

115 Kennondale Lane, Richmond, Virginia 23226

TABLE 1. Comparative statistics of 4 years of banding at Kiptopeke Beach, Virginia. Details of the banding results for 1969, 1970, and 1971 have been published previously (RAVEN, 41: 45-49, 1970; EBBA NEWS, 34: 246-249, 1971; RAVEN, 43: 42-45, 1972).

	1969	1970	1971	1972	
New birds trapped	10,576	13,497	9,680	7,331	
Total species	101	97	101	95	
Total net-hours	18,439	14,178	13,403	11,878	
Trapping efficiency, new birds per 100 net-hours	57	95	72	62	
Days of operation	58	51	51	44	

SIGHT RECORD OF A FERRUGINOUS HAWK IN SOUTHWEST VIRGINIA

LEE R. HERNDON

On the afternoon of 14 January 1973, Glen Eller and the writer were driving along county route 670, Washington County, Virginia, in the area of Avens Bridge about 0.5 mile northwest of the point where the bridge crosses South Holston River and not far from the upper end of South Holston Lake. About 0.25 mile northwest of the junction of routes 664 and 670 a hawk was observed flying over the ridge to the northeast of us. The general area was rather rolling farmland with a few scattered apple trees between us and the top of the ridge, which was sparsely wooded. The sun was shining brightly from behind us and the ground was covered with snow.

The hawk was sailing at about 300 yards distance, and our first impression, judging by size and behavior, was that it was a Rough-legged Hawk, *Buteo lagopus*. Occasionally it would disappear for short periods behind the trees or the ridge. We observed it almost constantly for about 20 minutes using 7x50 binoculars. Near the end of our observations Glen was able to observe it for a brief period while in flight through a 30x Balscope Senior spotting scope. On one occasion the bird perched in a tree facing us. Before perching, both of us saw the extended legs, which were feathered to the toes. It was observed

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while perched only through binoculars. In this position it appeared all white or somewhat off-white. We could see no streaking or barring as the bird faced us with an unobstructed view. In flight we were able to view both top and bottom, although it was never directly overhead. There was no visible banding in the tail as viewed from either top or bottom, nor was there a black band at the tip of the tail. The knuckle marks were visible but inconspicuous and only slightly darker than the underwings and body. Only the tips of the primary wing feathers were black. The dark-colored feather tips did not extend into the secondaries. From underneath, only the tips of the primaries and the knuckles appeared darker than the remainder of the underparts. We were unable to discern any dark V area formed by the retracted legs. The central and upper back was rufous with the feathers bordering these areas edged with buff, giving these areas a somewhat mottled appearance. There were no distinctive head markings. In general it appeared light but not as light as the underparts.

There appeared to be a slight wind blowing from the southwest, at the elevation where the bird was flying, as it seemed to face us most of the time except when banking, and at times it appeared to remain motionless in one spot with an occasional flap of the wings as if to hover, but it actually never did.

The hawk possessed *Buteo* characteristics, size, and behavior. With feathered tarsi it could not have been a Krider's Hawk, *Buteo jamaicensis kriderii;* it was too small for a Golden Eagle, *Aquila chrysaetos;* there was no suggestion of albinism, and coloration was definitely not that of the Rough-legged Hawk in either light or dark phase. Therefore the only conclusion to which we could arrive, was that the bird under observation was a subadult Ferruginous Hawk, *Buteo regalis.*

Route 6, Box 392, Elizabethton, Tennessee 37643

SPRAGUE'S PIPIT IN WISE COUNTY, VIRGINIA

RICHARD H. PEAKE, JR.

On the morning of 30 October 1971 Dwight E. Peake and Richard H. Peake were observing birds at Clinchhaven Farms, an extensive dairy farm in the Powell Valley section of Wise County, Virginia. As the observers drove through the farm, a number of Vesper Sparrows appeared. In particular two birds perched on wires along the road about 18 feet ahead of the car and thus about 15 feet from the observers attracted their attention.

One bird was perched on a telephone wire and one on the wire of a fence and close to the ground. The higher bird was quickly identified as a Vesper Sparrow, but the other obviously was different. It looked like a small Vesper Sparrow, but its bill was thin and *not* sparrow-like. Aware of the bird's unusual appearance, the observers checked carefully for field marks. A narrow but clear eye ring was apparent on a very light brown bird. Its crown, back, and upper breast were striped with darker brown. The bird's tail was hidden in high grass. After about 3 minutes steady observation, the Peakes lost sight of the bird, which moved down into the grass.

The observers thereupon left the car and, after searching several more minutes, flushed the bird, which uttered a sharp *scrit* reminiscent of the Water Pipit, *Anthus spinoletta* (Linnaeus), *jeet* call yet different (seemingly more wiry). Its flight also was pipit-like. On the basis of the observations cited

above the bird was identified as a Sprague's Pipit, *Anthus spragueii* (Audubon), a species which the writer had previously observed near Dallas, Texas. Further attempts to locate the bird again that morning proved fruitless, although a small flock of 5 Water Pipits was flushed. The writer and Dr. Philip Shelton of Clinch Valley College subsequently visited the area in an effort to collect the bird but could not find it.

Apparently there is no previous listing for the Sprague's Pipit from Virginia except a record from a Christmas bird count conducted in the Mt. Rogers area. This record, described in the count report simply as "pipit," depends upon a bird "identified in flight by call as Sprague's" by Richard L. Diener (*Audubon Field Notes*, 9: 123, 1955). Although the Diener record by itself would seem insufficient, certainly the material presented in this note should suffice to place Sprague's Pipit on the Virginia list, though with hypothetical status. In recent years there have been a number of records of the Sprague's Pipit from Tennessee, Georgia, and other southeastern states. And on 18 March 1972 a party identified a bird of this species near Raleigh, North Carolina (*American Birds*, 26: 591, 1972). Observers in Virginia should alert themselves to the possibility of Sprague's Pipit occurring in this state.

Of interest also is the record of Water Pipits mentioned above; it is only the second for Wise County. The other is that of a bird seen by the writer on the campus of Clinch Valley College at Wise on 13 December 1968.

Clinch Valley College of the University of Virginia Wise, Virginia 24293

STARLINGS BUILD MAMMOTH NEST IN VIRGINIA BEACH ATTIC

JEWETT P. MONCURE

In September 1972, I was preparing to hang a heavy fixture on the wall of the second floor of our garage apartment, situated on the ocean front at Virginia Beach. To hang this fixture it was first necessary to determine the location of the joists, a matter that I believed might be accomplished by an inspection of the attic. My only previous view of the attic had been at least six years before, when I had merely raised my head through the overhead trap door and given the attic a cursory inspection.

But this time, after rigging a ladder under the trap door, I raised the door, entered the attic, then crawled on hands and knees along the beams leading south to the area I wished to inspect. Ahead of me, at the peak of the roof, was a triangular ventilation louvre opening to the south, and behind me, opening to the north, was a similar ventilation louvre. Sufficient daylight entered these louvres to bathe the attic in semidarkness.

Having finished my inspection to the south, I swiveled on my knees and faced north, the direction of the trap door and the northern ventilation louvre. At this instant I was startled, and for a fleeting moment frightened (I'd *had* it, for before me loomed the possible lair of an overwhelming horde of ravenous rats; *such* was my thought!)—as I saw, in the eerie gloom, a huge mound surmounting the attic floor at its northern end.

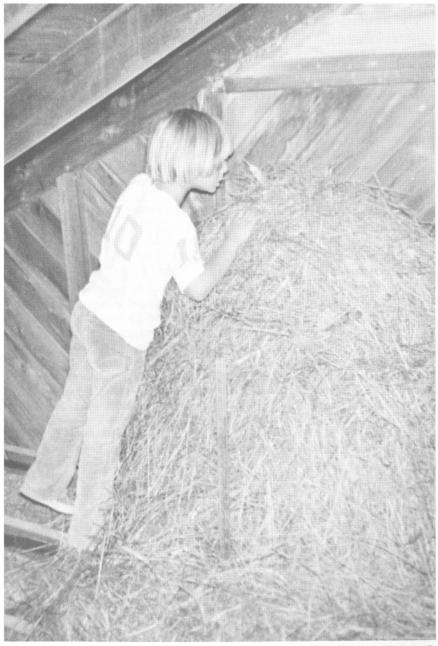


FIGURE 1. Huge Starling nest found in Virginia Beach attic. Photo by Jewett P. Moncure.

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Composed, after my initial surprise, I crawled toward this veritable haystack, rose to my feet, and gave it a close inspection. It was then that I saw a cupshaped depression at its summit and realized that the huge mound was but the base of a modest little bird's nest. The nest had apparently not been used.

Later, I learned from my neighbors to the north that they had observed Starlings, throughout the spring and early summer, entering and leaving the northern ventilation louvre and carrying in beakloads of nesting materials. Thus was the mystery of the mound cleared up.

Because this pile of tinder constituted a potentially great fire hazard, I dismantled the entire nest, removed it from the attic, sent it off with the trash, and screened both louvres with wire mesh screening. I dismantled the nest by hand, starting at its top and stuffing its densely packed material into 20-gallon plastic bags that I then lowered through the trap door. In pulling the "straw" from the mound, it was greatly loosened and its bulk thereby increased; its total bulk on removal was 170 gallons ($8\frac{1}{2}$ bags full). Its total net weight was 42 lbs. These nine bags, set out in a line alongside one another awaiting the trash truck, made a mound 2 feet high, 3 feet deep and 18 feet long. *One bird's nest!*

Halfway down in the mound I uncovered the nest of a previous year, partially fouled with bird droppings and containing fragments of broken blue egg shell. Also, to one side of the mound, I found the dried remains of two young nestlings, apparently removed from the nest by the parent birds.

From the mound I extracted 500 sample units of its materials. An analysis of this material showed almost an exact third to consist of each of the following: (a) Stalks of American beach grass from 4 to 15 inches in length. This grass grows on nearby dunes. (b) Varying lengths of trailing weeds and small roots. (c) Bundles of pine needles from nearby Japanese black pines (3 needles per bundle).

The total weight of these 500 sample units was 48 grams or 1.69 ounces, almost exactly 1/400 of the weight of the entire mound. Hence, the entire mound contained approximately 200,000 units of material. It is not known how many units a bird averaged on a trip, but assuming an average of 2 units carried per trip, the resulting number of trips would be 100,000. If the nest were built over a period of four years by two birds, each bird being employed for three months of each year at nest building, each bird of the pair would make 4,167 trips per month or 139 trips per day or 10 trips per hour during a 14-hour work day. Of course, the foregoing is pure speculation, based upon unprovable assumptions, but it at least gives a fairly accurate idea of the great amount of bird labor involved in the construction of this mighty nest.

Because of the overwhelming circumstantial evidence set forth in the foregoing account, the Starlings responsible for the commission of these acts, whose exact identities are still unknown, have been tried, in absentia, and found guilty of trespassing, littering, causing a serious fire hazard and, in addition, conspiring to upset the balance of nature by augmenting the already cataclysmic Starling explosion. These unknown culprits are still at large and pose a serious threat wherever they may be. Please alert all hawks, falcons, house cats, attic inspectors, and bird watchers!

6804 Ocean Front, Virginia Beach, Virginia 23451

THE PEREGRINE FALCON: AN OPPORTUNIST?

BILL WILLIAMS

Up until the time the bird appeared, that March day (11 March 1972) had been all work. Dr. Mitchell Byrd, Gary Seek, and I had spent most of the day on Virginia's Eastern Shore erecting aluminum platform structures anticipating their use as nesting sites by the returning Ospreys. Our labor completed, we were winding our way slowly through the narrow salt marsh channels at the north end of Mockhorn Island heading towards the public boat ramp at Oyster, Virginia. The air was cool and crisp with only whisps of clouds on the horizon, broken now and then by the fluttering wings of Buffleheads and Horned Grebes that flushed at the approach of the boat.

Then it appeared—a hawk, a falcon, a Peregrine Falcon, circling in closing arches just above the boat. We stopped to admire and congratulated ourselves on the end of a rewarding day with such a sight. The falcon rose and was gone, so we pointed for shore again.

Some quarter of a mile farther the falcon reappeared. We continued our progress believing the Peregrine would soon disappear. But no, the bird seemed to stay right with the boat. Odd, we thought, but purely coincidental nonetheless.

Coincidence maybe, but what transpired next bore out a different notion. As stated earlier, we were constantly flushing small ducks before us. Suddenly the Peregrine plummeted with almost incredible speed ahead of the boat. He darted by us, targeted on a Bufflehead sputtering off the water 50 yards off our bow. Like a shotgun blast, the falcon hit the duck. A sure kill, we thought; yet somehow the prey escaped, dropping weakly to the water.

The event occupied all of a matter of seconds and again we thought only coincidence. Not for long. The Peregrine Falcon reappeared about a mile farther, and we more than hoped to be entertained again. No worry. A Bufflehead scampered along the surface of the water off to our right. The falcon dipped and with a few short, powerful wing beats tucked and pierced by us with such grace that it was hard to imagine that there could be destruction, not preservation, as its goal. At what appeared to be too late, the Bufflehead splashed headlong into the water as the Peregrine shot by, sweeping upward out of its power dive. The falcon circled out of sight and was gone.

Coincidence? Not twice in a row by the same bird. We were being used, used to flush unwary prey that was more concerned with our approach than with the prospect of being blasted by an airborne predator. I added further evidence to this claim later that same month near Wachapreague, Virginia, on the Eastern Shore. Carrying a boat load of equipment through a small channel, Ruth Beck and I saw a winged projectile whip past our boat as we approached a bend in the creek. It was a Peregrine Falcon. It banked around the bend and disappeared only to reappear seconds later arching upwards with a Horned Grebe dangling in its grasp.

These incidences lend credence to the idea that in fact the predator was allowing for the approach of our boat not only to flush its prey but more importantly, to distract it to the extent that the prey was seemingly unaware of the falcon's presence.

Whether or not such behavior is of adaptive significance is hard to rationalize. Certainly it was beneficial. But I cannot see Peregrine Falcons regularly fol-

lowing boats to obtain food as gulls will follow tractors at plowing time. I must believe the falcon was an opportunist able to make the most out of an advantageous situation, as any successful predator must. Similarly, we too must be opportunists and make the most of our efforts to preserve the Peregrine Falcon so that all people may someday find themselves awed by the aerial abandon these graceful predators demonstrate as they perform the task of living.

157 West Queens Drive, Williamsburg, Virginia 23185

PEREGRINE FALCON ON VPI&SU CAMPUS

RICHARD N. CONNER

On 12 May 1972 at 6:30 a.m. I saw a Peregrine Falcon, *Falco peregrinus*, next to Julian Cheatham Hall, the forestry and wildlife building at Virginia Polytechnic Institute and State University at Blacksburg, Virginia. While watching a Robin probing in the lawn, I glimpsed a crow-sized falcon rapidly stooping on the Robin. Just before the falcon struck, the Robin flew off giving alarm calls in rapid succession. After a puff of feathers, the Robin flew directly to the nearest shrubs with the falcon 4 feet behind and closing.

I noted the pursuing falcon had the characteristic white upper breast and throat and the "helmet" of an adult Peregrine Falcon. I also noticed the Robin had only two rectrices left. As the Robin entered the shrubs with about 6 inches to spare, the Peregrine veered upward and flew over a building and out of sight. The Robin remained in the shrubs for about 6 hours. A careful examination later revealed the Robin apparently suffering more from shock than body damage.

Department of Fisheries and Wildlife Sciences Virginia Polytechnic Institute and State University Blacksburg, Virginia 24061

A CEDAR WAXWING NESTING

HAZEL S. MOORE AND EVELYN J. LEWIS

On 6 July 1972 Ernest and Hazel Moore discovered a nest of the Cedar Waxwing, *Bombycilla cedrorum*, under construction about 7 miles southwest of Floyd Courthouse, Floyd County, Virginia. The nesting site was an apple orchard near the farm home of Mrs. Lorraine Weeks on U. S. Route 221, and the nest was located on a terminal branch of an apple tree about 12 feet above the ground. The nest was checked again on 20 and 21 July, and one of the adults appeared to be incubating or brooding.

On 25 July Evelyn and Pete Lewis found 4 young in the nest which appeared to be 5 or 6 days old. Attempts to photograph the adults feeding the young were unsuccessful, as it was not possible to get an unobstructed view of the nest from afar because of heavy foliage on an overhanging limb. Other waxwings were much in evidence about the area during this time, flying overhead in groups of 4 to 6, and at least one adult was observed feeding another apparently

mature bird. Again on 26 July there were still 4 young in the nest, and on 2 August Ernest Moore observed the nest from the ground and watched both adults feeding the nestlings.

The Lewises returned to the nest on 3 August and immediately saw a welldeveloped immature bird on or behind the nest, the bird quickly flying away quite strongly. There was some question as to whether this bird belonged to the brood raised in this nest. Shortly thereafter, an adult Cedar Waxwing appeared in the apple tree, and a young fledgling struggled out of the nest and followed the adult up into the center of the tree. A check of the nest with a mirror revealed one dead young inside with many flies swarming over it.

> 1031 Windsor Avenue, S.W., Roanoke, Virginia 24015 6313 North Barrens Road, N.W., Roanoke, Virginia 24019

REVIEW

Words for Birds: A Lexicon of North American Birds with Biographical Notes. By Edward S. Gruson. Quadrangle Books, New York, 1972: 305 pp. Price, \$8.95.

A reader's view of Gruson's *Words for Birds* will depend on the level of his expectations. For a person with an interest in the oddities of scientific nomenclature or who wishes to know a bit about the origins of bird names, this volume will provide many hours of enjoyment. For a serious ornithologist, however, the book's many errors and often blatant naiveté render it very unreliable and almost worthless except as a handy means of quick reference, for which *Words for Birds* will be valuable until a more careful work replaces it.

On the whole Gruson's handling of Latin and Greek terms appears satisfactory, but his discussions dealing with modern languages are less successful. For example, he cites Audubon's Creole ancestry as evidence that the painter must have been the son of a black woman. In order to arrive at this conclusion, Gruson chose to ignore *all* of the commonly accepted meanings of *Creole* in order to adopt the most sensational.

As the book jacket proclaims, Gruson's professional training is in the fields of biochemistry and city planning. Evidently he has only recently taken up birding, and his enthusiasm does not altogether hide his lack of knowledge of birds and birding. No birder, for instance, would dispute that the Red-tailed Hawk has many "color variants," but at the same time no birder with much field experience would agree that the reddish tail "is not useful." Another example of the naive quality of some of Gruson's entries may be found under *Goshawk*. Gruson suggests that the gos of Goshawk is "an allusion to a presumptively favorite food," the goose. Certainly gos means goose, but in fact wild Goshawks do not seem particularly inclined to hunt geese, though John Birchard May (*The Hawks of North America*, 1935, p. 23) lists ducks among the prey of this accipiter. It is far more likely that gos became attached to this hawk because this bird was used by medieval falconers to hunt large game, including geese.

Despite the flaws of *Words for Birds* that make its value to the ornithologist questionable, the enthusiasm and sensationalism of Gruson will provide much

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pleasure to readers who have no great interest in scientific nomenclature, and the book may stir in them such an interest. Although the printing of misinformation is deplorable, *Words for Birds* definitely will do more good than ill. One should check out a copy from the public library and read it, but only the person with money to spare should add this volume to his personal ornithological or etymological library.

Richard H. Peake

LOCAL CHAPTERS OF THE VSO

This list of local chapters, compiled by Myriam P. Moore, chairman of the Local Chapters Committee, has been revised to February 1973. The number

in parentheses after the chapter name is the approximate total number of members of that chapter.

- 1. Augusta Bird Club (100), Staunton-Waynesboro
- 2. Cape Henry Bird Club (120), Norfolk
- 3. Charlottesville-Albemarle Bird Club (75), Charlottesville
- 4. Clinch Valley Bird Club (20), Tazewell
- 5. Cumberland Bird Club (24), Wise
- 6. Danville Bird Club (24), Danville
- 7. Hampton Roads Bird Club (100), Newport News-Hampton
- 8. Lynchburg Bird Club (215), Lynchburg
- 9. Marion Bird Club (17), Marion
- 10. New River Valley Bird Club (12), Blacksburg-Radford
- 11. Northern Virginia Chapter (125), Arlington-Fairfax
- 12. Piedmont Chapter (30), Gordonsville
- 13. Richmond Natural History Society (100), Richmond
- 14. Roanoke Valley Bird Club (110), Roanoke-Salem
- 15. Rockbridge Bird Club (10), Lexington
- 16. Spring Creek Bird Club (25), Darlington Heights

FORMER VSO PRESIDENT HONORED

The Raven has belatedly received notice of an honor bestowed on a former VSO President. On 29 October 1971 official ceremonies were held at the former Williams River Public Hunting and Fishing Area in Pocahontas County, West Virginia, renaming it the Handley Public Hunting and Fishing Area in honor of Charles O. Handley, Sr., who retired in 1965 from the West Virginia Department of Natural Resources. A bronze plaque on the Area notes that Mr. Handley "was the guiding force in establishing such areas throughout West Virginia." A photograph of the plaque appeared in the February 1973 issue of *Wonderful West Virginia*.

Mr. Handley, who was formerly with the Virginia Commission of Game and Inland Fisheries, was a charter member of the VSO and its second President

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from 1935 to 1937. He now lives near Lewisburg, West Virginia, where he and Mrs. Handley recently celebrated their fiftieth wedding anniversary.

NEWS AND NOTES Compiled by F. R. Scott

GREAT CORMORANT IN SUMMER. On 4 August 1972 Douglas S. Davis carefully observed an adult Great Cormorant at Back Bay National Wildlife Refuge, Virginia. The white patches were quite evident on the flanks. This appears to be the first summer record of this species for Virginia.

WHITE IBIS APPEAR AGAIN. A big influx of White Ibis occurred in Maryland following the 1972 nesting season, but only three reports were received from Virginia. At Virginia Beach, Betty Lancaster found one from 26 June to 2 July and another on 9 August, while Richard A. Rowlett saw an immature at Chincoteague Refuge on 12 August 1972.

FLAMINGO IN VIRGINIA AGAIN. An American Flamingo suddenly appeared on Assateague Island, Virginia and Maryland, following the passing of tropical storm *Agnes* in late June 1972. During the summer it ranged up and down the island, mainly feeding in the ocean surf and was last thought to be seen in early or mid September. Richard A. Rowlett and Paul G. DuMont saw it on August 12 just south of the Ocean City inlet and described it as a very healthy, rich pink bird, alert, wary, and feeding readily in the shallow surf. Most other observations were by fishermen, hikers, and National Park Service and Chincoteague Refuge personnel in remote sections of the island (but always on the beach) and were reported secondhand by Rowlett or J. C. Appel, the refuge manager. Appel noted the only definite refuge record as being on 31 July. More details on this bird were reported elsewhere (*Mary'and Birdlife*, 28: 148-149, 1972). Another report of an American Flamingo on the beach at Back Bay National Wildlife Refuge on 8 September 1972 may have been the same bird (Frank Smith, *fide* Dennis F. Holland).

MUTE SWANS AT CHINCOTEAGUE. According to J. C. Appel, 3 Mute Swans, one pair and one single, spent most of the summer of 1972 on Chincoteague National Wildlife Refuge, Virginia. The pair had a nest containing 2 eggs, but only one young was later seen by refuge personnel. Later in the fall up to 5 birds were reported here between 21 October and 25 November 1972 (M. A. Byrd, Edmund and Harry LeGrand, J. Merrill Lynch, J. O. Pullman, and others). There were differing reports on whether these were all adults or whether some were immature birds.

FULVOUS TREE DUCKS APPEAR AGAIN. A single Fulvous Tree Duck was noted at Chincoteague Refuge, Virginia, between 11 and 27 August 1972 by P. G. DuMont, R. L. Pyle, and R. A. Rowlett. Two were also present here 23-24 November 1972 (Edmund and Harry LeGrand and J. Merrill Lynch).

PURPLE GALLINULE AT LYNCHBURG. According to Ruskin S. Freer, a Purple Gallinule appeared at a pond south of Lynchburg about 27 May 1972 and was seen and photographed by M. F. Stephens, a Lynchburg osteopath. Color photographs of the bird have been examined and the identification confirmed by Freer and F. R. Scott. The bird was still present on 20 PAGE 80

August. The species has been seen in the area at least since 1963, according to Stephens, and may have nested, although he has never seen 2 birds at one time.

RUFFS FOUND AT CHINCOTEAGUE. R. L. Ake reported a Ruff at Chincoteague National Wildlife Refuge on 9 August 1972, and another, or possibly the same bird, was found here on 27 August 1972 by P. G. DuMont and C. R. Vaughn.

LESSER BLACK-BACKED GULL IN CHESAPEAKE BAY. R. L. Ake and Jorn Ake observed a Lesser Black-backed Gull on the south tunnel island of the Chesapeake Bay Bridge-Tunnel at dawn on 28 October 1972. The bird, which was smaller than nearby Herring Gulls, had a mandle the color of a Laughing Gull's, but its bill was yellow with a red spot on the lower mandible and its legs were also yellow.

EARLY LITTLE GULLS AT CHINCOTEAGUE. Three immature Little Gulls changing into winter plumage were found at Chincoteague National Wildlife Refuge on 27 August 1972 by P. G. DuMont, C. R. Vaughn, and V. Elizabeth Weggel. Apparently one of these birds had been seen here earlier on 24 August by Claudia Wilds.

SANDWICH TERNS NESTING. M. A. Byrd, Gary Seek, and Jerry Via counted 21 Sandwich Tern nests (with 17 adults around them) in a large Royal Tern colony (estimated at 4500 pairs) on Ship Shoal Island, Virginia, on 11 July 1972. Returning with John Weske on 29 July, Byrd was able to band 15 young Sandwich Terns from one creche. He felt there were undoubtedly more of these birds in the colony. This number represents a decided increase in the known breeding population of the Sandwich Tern in Virginia.

RED-COCKADED WOODPECKERS ON PIEDMONT. According to C. C. Steirly, two nesting sites of the Red-cockaded Woodpecker were found by Frank Burchinal in Seward Forest near Ante, Brunswich County, Virginia, in June 1972. These appear to be the first nest records for the Piedmont since 1921. Steirly also reported several additional nest sites found in Sussex County south of Wakefield.

WHITE-WINGED CROSSBILL IN LATE MAY. Keith Fielder found a White-winged Crossbill fluttering weakly at Lynchburg, Virginia, on 21 May 1972. Its lower mandible was completely broken off, and the bird soon died and was preserved.

WHITE-THROATED SPARROW IN SUMMER. Charles E. Stevens found a singing White-throated Sparrow in Charlottesville, Virginia, on 24 June 1972. Summer records of this species have been increasing in recent years.

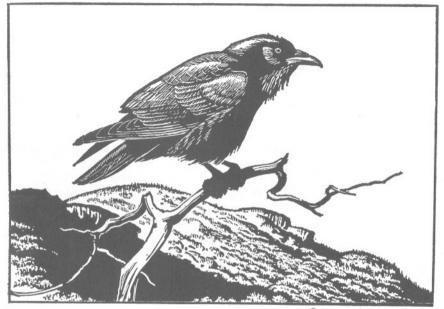
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Courtesy of Walter Weber

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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), \$3.00 for active members, \$5.00 for sustaining members, \$10.00 for contributing members, \$100.00 for life members.

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- *President:* MITCHELL A. BYRD, Department of Biology, College of William and Mary, Williamsburg, Virginia 23185.
- Vice President: J. J. MURRAY, JR., Department of Biology, University of Virginia, Charlottesville, Virginia 22903.

Secretary: ROBERT J. WATSON, 2636 Marcey Road, Arlington, Virginia 22207.

Treasurer: MRS. RUTH A. BECK, Department of Biology, College of William and Mary, Williamsburg, Virginia 23185.

Editor: F. R. SCOTT, 115 Kennondale Lane, Richmond, Virginia 23226.

Associate Editor: MITCHELL A. BYRD.

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THE BIRDS OF ROCKBRIDGE ALUM SPRINGS John P. and Claudia L. Hubbard

A former spa of great historical interest, Rockbridge Alum Springs is also known as a place of natural beauty and a haven for wildlife. Located in the eastern, outlying ridges of the Allegheny Plateau and surrounded by thousands of acres of the George Washington National Forest, this isolated place in an underpopulated region is a reminder of the wilds of early Virginia. From the 1830's almost until World War I, the spa was one of the most popular in Virginia-a cool retreat from the humid coast and its heat and disease. After the spa closed, the buildings and other structures began to fall victim to decay, vandalism, and other forms of decline. Rescue began in 1942, when Mr. and Mrs. Harold Harris Bailey bought the property and set out on the long, difficult job of restoration, repair, and debris-clearing that was needed to bring "The Alum" back to its present status. Over a dozen buildings and other structures were saved, and these grace the clearing of some 20 acres and the nearby woodland of the old spa. Except for this clearing, several score of acres of hay fields and old orchards, and a stream and ponds, the property is mainly in second-growth forest.

Besides birds, the area supports a variety of mammals, reptiles, amphibians, fishes, invertebrates, and plants, examples of which are the black bear (*Ursus americanus*), spotted skunk (*Spilogale putorius*), timber rattler (*Crotalus horridus*), many salamanders, brook trout (*Salvelinus fontinalis*), and a host of wild flowers. Truly, this is a natural paradise, as well as a site of great historical interest.

We spent the period from January 1969 through March 1971 living at Rockbridge Alum Springs curating the Bailey-Law Collection for Virginia Polytechnic Institute and State University (Hubbard, 1970a). During that time, we made observations on the birdlife and banded over 500 birds. This report is based on that information and is offered to complement the most recent work on the birds of Rockbridge County by Dr. Joseph J. Murray (1957). Dr. Murray has made this one of the ornithologically best known areas in western Virginia, but his work has been mainly concentrated farther east in the county. Rockbridge Alum Springs is in the westernmost portion of Rockbridge County, in a wedgelike extension bordered by Bath and Allegheny Counties. Our report is far from exhaustive, but it should serve as a basis for a preliminary assessment of the birdlife.

Rockbridge Alum Springs is named for a series of mineral springs that issue from the base of Mill Mountain, a long northerly trending ridge that forms the western boundary of the property. The maximum elevation of Mill Mountain in that vicinity is about 2500 feet, while the parallel North Mountain, to the east, reaches over 3000 feet. Rockbridge Alum Springs occupies the long, narrow valley between these two ridges, with the elevation at the Springs proper being about 1700 (Lexington is about 1000 feet). Alum Springs Creek drains the valley, joining Bratton's Run near the little settlement of California (about 1.5 miles northeast of the Springs), and thence drainage is to the Maury River near Goshen.

The dominant vegetation on the ridges and slopes is oak (*Quercus* spp.) woodland mixed with other hardwoods and conifers, especially scrub pine (*Pinus virginiana*). Along the valley floor is lusher growth, including especially white pine (*P. strobus*), hemlock (*Tsuga canadensis*), hardwoods, and shrubs

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such as rosebay (Rhododendron maximum). The only virgin timber in the area is a stand primarily of sugar maple (Acer saccharum), located above the property on the east slope of North Mountain, in an area called Rich Hole. The inhabited clearing at the Springs offers evidence of the primeval forests of the past. There grow great oaks (mainly Q. alba, but also velutina, prinus, and other species) that were undoubtedly left for shade trees when the forests were first cleared between 1830 and 1850. We measured the circumference of 30 of these trees, the smallest of which was 7.5 feet, the average 11.5 feet, and the largest 21 feet. These trees grow on the valley floor, suggesting that climax forest in all but the best-watered areas was relatively xeric. Farther up Alum Springs Creek the valley narrows and conditions are more mesic. The creek itself is a small, rocky-bottomed stream, seldom more than a few feet wide and a few inches deep. Just below the main buildings, the creek has been impounded to form a sterile pond, while another more vegetated pond exists in a nearby field, fed from underground springs and seepage. We estimate that less than two acres are included in the two ponds.

Annotated List

The following list contains 122 species, of which 120 were recorded at Rockbridge Alum Springs or its immediate vicinity; of the latter, 53 species were banded by us in the period from April 1969 through March 1971. Twentysix species were found breeding (marked with double asterisk), while 38 other species probably breed in the area (single asterisk).

*GREEN HERON, Butorides virescens

Rare summer resident. All records of single birds seen at the ponds.

**WOOD DUCK, Aix sponsa

A pair present in spring 1970; on 11 May we found a female and 7 downy young (one photographed) in the forest near Alum Creek.

BUFFLEHEAD, Bucephala albeola

A pair seen on one of the ponds on 30 March 1969.

*TURKEY VULTURE, Cathartes aura

Uncommon summer resident. Not resident as noted elsewhere in the county (Murray, 1957:14). Early dates: 2 on 16 March 1969, 3 on 1 March 1970; latest were several on 16 September 1970.

BLACK VULTURE, Coragyps atratus

Two at California on 10 June 1970. This species was less common in the region than the Turkey Vulture and seldom seen away from the Great Valley.

RED-TAILED HAWK, Buteo jamaicensis

An adult seen on 2 and 9 December 1970.

**BROAD-WINGED HAWK, Buteo platypterus

Uncommon summer resident. In 1969, the local pair was seen with ac-

companying young (on the wing) as early as July and in 1970 on 8 August. Another pair present on 3 June 1970. Early dates: 2 on 17 April 1969; 3 on 15 April 1970. Murray (1957:16) considers the species scarce in the county in April and rare in summer, with no definite breeding record.

*AMERICAN KESTREL, Falco sparverius

Rare resident. While infrequent at Rockbridge Alum Springs, this was the commonest hawk seen in the county.

*RUFFED GROUSE, Bonasa umbellus

Generally a rare resident. Heard drumming in April and May and again in the autumn.

BOBWHITE, Colinus virginianus

One seen in the spring of 1969 and 2 on 21 May and 10 June 1970 by George Bogan. In the past Mr. Bailey is said to have fed these quail on the property, but they have gradually disappeared.

**TURKEY, Meleagris gallopavo

Uncommon resident. Adult with young seen in June 1969.

AMERICAN WOODCOCK, Philohela minor

One on 12 August 1969 and 19 March 1970 and one between California and Goshen on 20 May 1970. George Bogan captured one in a building on 5 August 1969 near Millboro Springs that we banded and released at Rockbridge Alum Springs the next day.

SOLITARY SANDPIPER, Tringa solitaria

One at the field pond on 22 April 1970.

*MOURNING DOVE, Zenaida macroura

Rare summer resident. Early date: two on 7 March 1970.

**YELLOW-BILLED CUCKOO, Coccyzus americanus

Uncommon summer resident. Early date: one on 11 May 1970. On 11 June 1969 we found a nest containing 3 eggs.

*SCREECH OWL, Otus asio

Heard in spring of 1969 and on 13 September 1970, and one (red phase) seen in the winter of 1969.

*GREAT HORNED OWL, Bubo virginianus

Presumably resident, although detected only rarely.

*BARRED OWL, Strix varia

Presumably resident, although detected only occasionally.

*WHIP-POOR-WILL, *Caprimulgus vociferus*

Uncommon summer resident. Early dates: 3+ on 27 April 1969; one on

15 April 1970; late date: one on 16 September 1970. One banded on 28 April 1969.

COMMON NIGHTHAWK, Chordeiles minor

One seen on 12 May 1970.

**CHIMNEY SWIFT, Chaetura pelagica

Fairly common summer resident. Early date: 3 on 16 April 1970; late date: 15 September 1970. In 1970 first detected roosting in chimneys on 22 April, gathering twigs for nests 11-13 May, and young heard in nest on 3 July. Five banded.

*RUBY-THROATED HUMMINGBIRD, Archilochus colubris

Uncommon summer resident. Early dates: one on 24 April 1969; one on 2 May 1970; late date: several on 6 September 1970.

BELTED KINGFISHER, Megaceryle alcyon

Uncommon, mainly winter resident.

**COMMON FLICKER, Colaptes auratus

Fairly common summer resident. Also one on 28 and 30 December 1969. Adults were incubating on 4 May 1969 and 8-11 May 1970, with noisy young heard in nests on 28 May and 14 June 1970. Courtship and pairing were noted as early as 12-14 April 1970, and on 30 April 1970 a pair was seemingly ejected from their nest hole by a Starling. One banded.

**PILEATED WOODPECKER, Dryocopus pileatus

Uncommon resident. An adult was seen at its nest hole several times in the period 30 April to 6 June 1970.

**RED-BELLIED WOODPECKER, Centurus carolinus

Uncommon resident. Young out of the nest were seen on 3 July 1970. Five banded.

RED-HEADED WOODPECKER, Melanerpes erythrocephalus

Two present from January through mid May 1969, singles on 3 and 12 May, 2 and 14 September, and 3 or more on 4 September 1970. Said to be quite rare now in the county by Murray (1957:30).

YELLOW-BELLIED SAPSUCKER, Sphyrapicus varius

Rare spring migrant. Recorded 26 March to 29 April 1970; also one on 18 October 1969 (banded).

HAIRY WOODPECKER, Dendrocopos villosus

Rare; a male found shot at California on 21 February 1970 and one seen at Rockbridge Alum Springs on 25 March 1970. The specimen (VPISU) is an example of *D. v. villosus*.

*Downy Woodpecker, Dendrocopos pubescens

Fairly common resident. Twenty-three banded.

EASTERN KINGBIRD, Tyrannus tyrannus

One from 29 April through 1 July 1970 (banded); may have been paired and bred.

*GREAT CRESTED FLYCATCHER, Myiarchus crinitus

Fairly common summer resident. Early dates: one on 26 April 1969; one on 24 April 1970. One banded on 31 May 1969.

**EASTERN PHOEBE, Sayornis phoebe

Common summer resident. Early date: one on 3 March 1970; also one present 13 November 1969 through 9 January 1970. In 1969 we found 13 nests, with the earliest eggs on 22 April and the latest on 22 June (clutches averaged 4.7 eggs for 10 sets). In 1970 the earliest eggs in 7 nests were on 28 April and the latest on 1 July (average of 4.6 eggs for 5 sets). Twenty-six banded.

**ACADIAN FLYCATCHER, Empidonax virescens

Uncommon summer resident. Early dates: one on 5 May 1969; one on 29 April 1970. We found a nest containing small young on 20 June 1969. Murray (1957:32) lists the earliest date of arrival as 3 May.

*EASTERN WOOD PEWEE, Contopus virens

Uncommon summer resident. Early date: one on 29 April 1970; latest date was one on 1 October 1969. Nine banded.

OLIVE-SIDED FLYCATCHER, Nuttallornis borealis

Singles seen on 16 and 17 May and 9 September 1970. Murray (1957:33) lists only one other county record.

TREE SWALLOW, Iridoprocne bicolor

Not seen at Rockbridge Alum Springs, but the 10 at Rockbridge Baths on 1 March 1970 were considerably earlier than Murray's (1957:33) arrival date for the county of 24 March.

**BARN SWALLOW, Hirundo rustica

Uncommon summer resident. Early dates: one on 6 April 1969; 2 on 3 April 1970. In 1969 we found 5 nests, the first eggs being detected on 4 May and the last on 11 June. In 1970, in 4 nests, the first eggs were on 26 April, the latter a day earlier than Murray's (1957:34) first eggs found in the county. Five banded.

PURPLE MARTIN, Progne subis

A female or immature male on 10 June 1970. According to Murray (1957:35), the species is rare in the county. The nearest nesting colony that we know of is at Clifton Forge, Allegheny County, in a martin house near the railroad yard.

*BLUE JAY, Cyanocitta cristata

Fairly common resident. Three banded.

*COMMON RAVEN, Corvus corax

Uncommon resident. In 1970 it was absent between mid March and early June, perhaps because nesting occurred outside the valley.

*COMMON CROW, Corvus brachyrhynchos

Fairly common resident.

FISH CROW, Corvus ossifragus

We never definitely identified this species in the county, but small-appearing crows were seen at times, mainly in winter, along Kerr Creek and the Maury River. Our nearest and only definite record was one at Staunton on 25 July 1970.

BLACK-CAPPED CHICKADEE, Parus atricapillus **CAROLINA CHICKADEE, Parus carolinensis

Based on banding studies, our findings support Murray's (1957:37) assessment of the status of these two species in the county, but the picture is complicated by singing birds. First, banding shows the Carolina Chickadee to be resident and the Blackcap to be a winter resident. This is based on the banding of 27 birds (8 Carolinas, 18 Blackcaps, 1 unidentifiable) and many recaptures and on the use of the mensural characters in Hubbard (1970b). Carolinas were banded and/or recaptured in 8 months of the year and in every season, whereas Blackcaps were banded and/or recaptured only in the period from 5 November through 1 April. Interestingly, 3 Blackcaps banded in the winter of 1969-70 were recaptured in January-February 1971, suggesting a regular return to the area of wintering birds.

In 1970 we kept daily track of the numbers of birds singing the *fee-bee*, *fee-bay* song of the Carolina and the *phoebe* song of the Blackcap, concentrating on the breeding period. Both songs were heard from 29 March to 9 September, but only Carolinas were known to be in the area from banding studies. This included a female captured at her nest in May, but her mate sang the Blackcap song. We can only conclude from this that vocal differences are not a satisfactory menas of distinguishing the birds in that area. Perhaps this is because Carolinas learn the *phoebe* song of the Blackcap when the two are together in winter and sing it even when the latter is absent. We heard both songs from the same flock and could elicit *fee-bee*, *fee-bay* songs by whistling the *phoebe* song. From these findings, we would suggest that summer Blackcaps can not be reliably identified in the area (and perhaps in western Virginia) on the basis of song alone, at least in areas where Carolinas are known to occur.

**TUFTED TITMOUSE, Parus bicolor

Fairly common resident. We found a nest with eggs on 4 May 1969 and one with small young on 24 May 1970. Forty-three banded.

**WHITE-BREASTED NUTHATCH, Sitta carolinensis

Fairly common resident. We found a nest with young on 4 May 1969 and one with eggs on 11 May 1970. Twenty-two banded.

DECEMBER 1973

THE RAVEN

RED-BREASTED NUTHATCH, Sitta canadensis

One present from January into March 1969, and singles on 28 March (banded) and 8 May 1970. Murray (1957:37) lists a late spring date for the county of 30 April.

BROWN CREEPER, *Certhia familiaris* One on 29 December 1969 and 1 or 2 in late March 1970.

WINTER WREN, Troglodytes troglodytes

One on 9 December 1970.

BEWICK'S WREN, Thryomanes bewickii

Singles on 8-10 April 1969 and 27 March 1970.

** CAROLINA WREN, Thryothorus ludovicianus

Rare resident. On 14 May 1969 we found a nest with large young in it, and on 29 July 1969 a dead young was discovered in a mist net, apparently killed by a copperhead, *Agkistrodon contortrix* (Hubbard, 1969). Five banded.

*MOCKINGBIRD, Mimus polyglottos

Rare resident; probably a pair at most occurred on the place. Three banded.

*GRAY CATBIRD, Dumetella carolinensis

Uncommon summer resident. Early dates: one on 4 May 1969; one on 25 April 1970. Ten banded.

**BROWN THRASHER, Toxostoma rufum

Uncommon summer resident. Early dates: one on 4 April 1969; at least 4 on 12 April 1970. On 11 June 1969 we found a nest containing eggs. Five banded.

**AMERICAN ROBIN, Turdus migratorius

Common resident in summer and rare to uncommon and irregular in winter. In 1969, the earliest eggs in 6 nests were on 28 April, with the latest evidence of nesting a female at a nest on 23 June. Eigth banded.

**Wood Thrush, Hylocichla mustelina

Uncommon summer resident. Early dates: one on 29 April 1969, one on 24 April 1970. We banded a fledgling on 3 July 1969. H. H. Bailey collected a nest of this species containing three thrush eggs and one of a Yellow-billed Cuckoo on 2 June 1945 (Bailey, 1945).

SWAINSON'S THRUSH, Catharus ustulatus

Singles on 12 and 17 May 1970 and 20 September 1969 (banded). Also, Dr. Kenneth Parkes saw 4 on the extremely early (autumn) date of 13 August 1969. Murray (1957:41) lists an early date in autumn of 2 September.

VEERY, Catharus fuscescens

One on 5 May 1969. Murray (1957:41) did not record the species in the western part of the county.

** EASTERN BLUEBIRD, Sialia sialis

Uncommon summer resident. Early dates: male on 15 March 1969, male on 23 February (and a pair on 27 February) 1970; latest was on 11 September 1970. In 1969 we found two nests, one with young on 4 May and one with young on 11 June. In 1970 material was being added to two nest cavities on 12 April, and eggs were present on 19 April and 21 April. A second nesting occurred in one nest, with 4 eggs seen on 1 July. We also saw this species at Goshen, Craigsville, and near Vesuvius, and numbers seemed to be increasing. Fifteen banded.

*BLUE-GRAY GNATCATCHER, Polioptila caerulea

Fairly common summer resident. Early dates: one on 9 April 1969, one on 15 April 1970; latest date: 2 on 14 September 1970.

GOLDEN-CROWNED KINGLET, Regulus satrapa

Uncommon winter resident.

RUBY-CROWNED KINGLET, Regulus calendula

Uncommon migrant. Recorded in autumn from 7 October to 5 November and in spring from 13 to 27 April. A very late record was of a singing male on 17 June 1969. Five banded.

CEDAR WAXWING, Bombycilla cedrorum

Generally irregular and uncommon migrant. Recorded from late August to 13 September and from 12 to 18 May. Also 7 on 14 February 1970.

**LOGGERHEAD SHRIKE, Lanius ludovicianus

Rare and irregular resident. Singles were seen at intervals through the year (January, April, July, September, December), including one on 27 July 1970 that attacked a Chipping Sparrow in a mist net (without harming it). In 1969 and 1970 a pair summered at nearby California from April or May into August. A nest was found there on 16 May 1970, and on 10 July a large young was seen with the adults in the area. This species is no longer common as stated by Murray (1957:43), being only rarely seen in the western part of the county.

**STARLING, Sturnus vulgaris

Common migrant and uncommon summer resident; irregular and generally rare in winter. In spite of concerted control efforts, a few may have successfully bred in 1969 and 1970. In 1969 nests with eggs were destroyed from 22 April to 24 May and one with young on 11 June. In 1970 nests with eggs were destroyed from 25 April to 22 May.

WHITE-EYED VIREO, Vireo griseus

Rare summer resident. One on 5 June 1969 and one from 27 April until 20 June 1970. The latter was singing and on territory, but it did not seem to have attracted a mate. Not apparently recorded in the western part of the county by Murray (1957:43).

YELLOW-THROATED VIREO, Vireo flavifrons

One on 27 April 1970.

*SOLITARY VIREO, Vireo solitarius

One on 27 April and 21 June 1970, and on 31 May 1970 we saw one on Mill Mountain carrying food.

*Red-eyed Vireo, Vireo olivaceus

Fairly common summer resident. Early dates: one on 10 April 1969; one on 16 April 1970; late date of 9 September 1970. Murray (1957:44) lists an early date of 21 April.

WARBLING VIREO, Vireo gilvus

Singles on 1 and 2 May 1970.

*BLACK-AND-WHITE WARBLER, Mniotilta varia

Uncommon summer resident. On 13 May 1970 a pair behaved as though near a nest.

*WORM-EATING WARBLER, Helmitheros vermivorus

Fairly common summer resident. Early date: one on 13 May 1970.

TENNESSEE WARBLER, Vermivora peregrina

Uncommon spring migrant. One to 3 from 12 to 15 May 1969 and from 9 to 17 May 1970. Murray (1957:45) cites only six spring records for the county.

NASHVILLE WARBLER, Vermivora ruficapilla

One on 1-3 May 1970. Murray (1957:45) lists only two other spring records.

*Northern Parula Warbler, Parula americana

Uncommon summer resident. Early dates: 2 on 18 April 1969; one on 27 April 1970.

*YELLOW WARBLER, Dendroica petechia

Uncommon summer resident. Early date: one on 29 April 1970.

MAGNOLIA WARBLER, Dendroica magnolia

One on 13 May 1970.

*BLACK-THROATED BLUE WARBLER, Dendroica caerulescens

On 24 May 1970, at least 3 males were singing territorially 'at Rich Hole above Alum Creek.

YELLOW-RUMPED WARBLER, Dendroica coronata

Uncommon spring and autumn migrant. One banded.

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*BLACK-THROATED GREEN WARBLER, Dendroica virens

Uncommon summer resident. Early dates: one on 5 May 1969, one on 29 April 1970. Summer birds were found well up Alum Creek and at Rich Hole.

CHESTNUT-SIDED WARBLER, Dendroica pensylvanica

Singles on 3, 9, and 10 May 1970.

BAY-BREASTED WARBLER, Dendroica castanea

One seen on 10 May 1970 by a VSO field trip. Reported by Murray (1957:48) to be scarce in spring.

BLACKPOLL WARBLER, Dendroica striata

Singles on 10, 13, and 30 May 1970.

*PINE WARBLER, Dendroica pinus

Fairly common summer resident. Present from 1 April to at least 9 September 1970 (to 15 September in 1969). Considered by Murray (1957:48) to be quite scarce in the county. Eleven banded.

PRAIRIE WARBLER, Dendroica discolor

Singles on 4 May 1969 and near Rich Hole on 24 May 1970.

**Ovenbird, Seiurus aurocapillus

Fairly common summer resident. On 14 June 1970 a pair behaved as though near a nest, and on 29 July 1969 a grown young was found dead in a mist net, apparently killed by a copperhead (Hubbard, 1969). One banded.

*LOUISIANA WATERTHRUST, Seiurus motacilla

Uncommon summer resident. Early dates: one on 29 March 1969; one on 1 April 1970. Murray (1957:49) lists an early date of 2 April. Two banded.

KENTUCKY WARBLER, Oporornis formosus

One seen on 13 May 1970. Considered rare by Murray (1957:49).

COMMON YELLOWTHROAT, Geothlypis trichas

One on 18 May 1969 (banded).

YELLOW-BREASTED CHAT, Icteria virens

One on 28 April 1970 (banded).

*Hooded WARBLER, Wilsonia citrina

Rare summer resident. Singles on 30 June (banded) and in July 1969, and on 16 June 1970.

WILSON'S WARBLER, Wilsonia pusilla

A female on 7 September 1970 (banded). Murray (1957:51) cites only 12 records for the county.

*AMERICAN REDSTART, Setophaga rutacilla

Rare summer resident.

HOUSE SPARROW, Passer domesticus

Irregular and rare visitant, mainly in winter. In spite of the presence of feeders, this species was seldom present for more than a few days and at long intervals. At nearby California it was a numerous resident and breeder.

*EASTERN MEADOWLARK, Sturnella magna

Uncommon summer resident. Early dates: 4 on 16 March 1969; 3 on 8 March 1970.

** RED-WINGED BLACKBIRD, Agelaius phoeniceus

Uncommon summer resident, breeding at the field pond. We found a nest with eggs on 7 June and one with small young on 2 June 1969. Two banded.

*Northern Oriole, Icterus galbula

Uncommon summer resident. Early date: one on 29 April 1970.

COMMON GRACKLE, Quiscalus quiscula

Fairly common migrant and uncommon late summer visitant, probably nesting elsewhere. Early dates: male on 1 March 1969; male on 3 March 1970.

*BROWN-HEADED COWBIRD, Molothrus ater

Uncommon summer resident. Early dates: one on 18 March 1969; several on 26 March 1970. One winter record, a male on 8-9 January 1970. No evidence of nest parasitism was found. Nine banded.

*SCARLET TANAGER, Piranga olivacea

Uncommon summer resident. Early date: one on 25 April 1970; latest were one each on 9 and 12 September 1970 (banded).

******CARDINAL, Cardinalis cardinalis

Uncommon resident. In 1969 we found a nest with young on 28 May, and in the period 4-7 August a female built a nest which was soon abandoned. On 2 September 1970 we banded 3 large young in a nest. Murray (1957:54) reports young in the nest only as late as 30 July. Eleven banded.

** ROSE-BREASTED GROSBEAK, Pheucticus ludovicianus

Uncommon summer resident. Early date: one on 27 April 1970; latest on 8 September 1970. On 30 June 1969 we banded two recently fledged young and an adult, and on 27 July an adult. Murray (1957:54) considers this species scarce in the spring and as breeding only above 2500 feet in the county. Five banded.

**INDIGO BUNTING, Passerina cyanea

Uncommon summer resident. On 17 July 1969 we found a nest containing one egg, but this was later abandoned. Six banded.

EVENING GROSBEAK, Hesperiphona vespertina

Winter resident, irregular but at times fairly common. Present from January to 8 May 1969 (with one on 1 June) and from 7 November 1969 through 19 April 1970. Numbers seldom exceeded 10 or 12 in a flock. One banded.

PURPLE FINCH, Carpodacus purpureus

Uncommon migrant, occurring from 14 April to 10 May 1970 and 9 to 15 November 1969. Also a male seen on 1 June 1969. Murray (1957:55) lists 5 May as a late spring date.

PINE SISKIN, Spinus pinus

Winter resident, at times fairly common. Present from January through 8 May 1969 and from 24 October 1969 through 10 May 1970. Numbers seldom exceeded 10 to 15 per flock. Said to be generally scarce in the county by Murray (1957:55), with no records later in spring than 11 April.

*AMERICAN GOLDFINCH, Spinus tristis

Fairly common summer resident; occasional in winter. Twenty-eight banded.

RED CROSSBILL, Loxia curvirostra

Essentially resident, but irregular as to occurrence and numbers. The records are summarized in Hubbard (1970c), with additional ones of a male on 7 September, 6 birds on 23 October, and 2 on 2 November 1970. An adult male banded on 13 March 1970. Rare in the county according to Murray (1957:56).

WHITE-WINGED CROSSBILL, Loxia leucoptera

Gale Monson saw a female on 21 February 1950. Murray (1967) does not list the species from the county, but there is at least one other recent report from there.

*RUFOUS-SIDED TOWHEE, Pipilo erythrophthalmus

Fairly common summer resident. Early dates: male on 29 March and female on 4 April 1969; male on 27 March and female on 6 April 1970; latest, a male on 2 November 1969. Ten banded.

SAVANNAH SPARROW, Passerculus sandwichensis

One in the hay fields in March 1970.

DARK-EYED JUNCO, Junco hyemalis

Fairly common winter resident, but numbers declined in hard weather. In 1969, latest in spring was one on 6 May; also present from 10 October 1969 to 25 April 1970 and again from 20 October 1970. In a sample of 6 birds preserved as specimens (all window kills from the period 22-29 March 1971): 2 females and 1 male are *Junco h. hyemalis*, 1 male is *J. h. carolinensis*, and

2 females are closer to J. h. carolinensis. Eighty-nine banded, including 3 in April 1969 that were recaptured in February 1970.

TREE SPARROW, Spizella arborea

Singles on 24 January (banded) and 18-19 February 1970.

**Chipping Sparrow, Spizella passerina

Common summer resident. Early dates: one on 27 March 1969; 2-3 on 27 March 1970; late dates: 30 October 1969, 26 October 1970. In 1969, the earliest eggs in eight nests were on 4 May, and young were found in the nest as late as 16 August. In 1970, the earliest eggs in four nests were on 3 May, and young were in the nest as late as 1 July. Sixty-seven banded, including 2 in April 1969 recaptured in April 1970, and one in October 1969 recaptured in May 1970.

*FIELD SPARROW, Spizella pusilla

Uncommon summer resident. Early date: one on 10 March 1970; latest: 2 on 26 October 1970 (banded).

WHITE-CROWNED SPARROW, Zonotrichia leucophrys

Uncommon migrant, recorded from 5 to 15 May 1969 and 8 to 9 May 1970 in spring, and on 5 November 1969 and 25 October 1970 in autumn. Seven banded.

WHITE-THROATED SPARROW, Zonotrichia albicollis

Migrant, at times fairly common. Recorded 17 April to 14 May 1969 and 19 to 24 April 1970 in spring, and on 25 October 1969 and 16 October to 14 November 1970 in autumn. Forty-nine banded.

FOX SPARROW, Passerella iliaca

Uncommon migrant, recorded 9-24 March 1969, 3-30 March 1970, and 27 February 1971 in spring, and on 29 October 1969 in autumn. Five banded.

LINCOLN SPARROW, Melospiza lincolnii

Singles on 5 and 13 May 1969 (both banded). Murray (1957:59) lists only one other spring record for the county.

SWAMP SPARROW, Melospiza georgiana

Singles on 1 April 1969 and 12-13 April 1970.

SONG SPARROW, Melospiza melodia

Uncommon winter resident. Seen from January into March 1969; from 29 October 1969 to 23 May 1970; and from 25 October 1970 onward. In 1970 a notable migratory wave occurred on 3 March. In the past the species has bred at Rockbridge Alum Springs, and its absence now as a breeder is unexpected. Evidence of former breeding is a nest in the H. H. Bailey collection, taken on 10 June 1954 and with the annotation that three young fledged from it.

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Delaware Museum of Natural History, Greenville, Delaware 19807

WHITE FRONTED GEESE AT HOG ISLAND REFUGE CHARLES BLEM

On 2 February 1973 I observed two White-fronted Geese, Anser albifrons, resting among a flock of several hundred Canada Geese at Hog Island Game Refuge, Surry County, Virginia. The birds were less than 200 meters away and were clearly visible. Members of my ornithology class were able to see the pink bill, black marks on the belly, and white patch on the front of the face of each goose. We watched the birds feed and preen for several minutes, during which time they seemed to remain slightly separated from the main flock. I subsequently visited the refuge several times in February and March but was unable to relocate them. Influx of more Canada Geese and movement of birds during freezing conditions in the marsh greatly contributed to the difficulties in finding these birds.

In the past few years, White-fronted Geese have been found wintering along the Atlantic Coast with greater frequency, but I am aware of only a single previous record of this species in Virginia (*Raven*, 38: 65, 1967). In addition, most sightings have been of single birds, some of which are suspected to be domestic escapees. Ornithologists who see this species in this region should examine adult bill color closely if possible. The subspecies commonly found in western United States, *A. a. frontalis*, has a pink bill as an adult and a yellow bill in immature plumage. The Greenland race, *A. a. flavirostris*, has a yellow bill in adult plumage. Further sightings of more than one Whitefronted Goose at a site and/or yellow-billed birds are needed to authenticate the natural presence of this species in Virginia.

> Virginia Commonwealth University, Department of Biology Richmond, Virginia

A HARLEQUIN DUCK IN SOUTHWESTERN VIRGINIA C. S. Adkisson and M. Grubb

The stretch of the New River inside the U.S. Army Ammunition plant near Radford, Virginia, is a locally well-known winter haven for ducks. From 1000 to 1500 wintered along the river between the Pepper's Ferry bridge at Virginia Route 114 and Whitethorn, where Tom's Creek flows into the river, in 1972-73.

On 20 February 1973 we conducted a survey by canoe of the ducks along the New River. As we passed Whitethorn downstream from the arsenal, we spotted a medium-sized duck in a flock of about 50 Buffleheads. The birds approached us, and as they wheeled and returned downstream, we could see white markings about the head and body of the largest and darkest bird in the flock. About a minute later this flock took off again and flew by within 75 feet of the canoe. From this distance we were able to see clearly that the bird was a male Harlequin Duck, *Histrionicus histrionicus*. The bird was the more conspicuous by its habit of flying with the smaller and lighter Buffleheads. A male Harlequin was also seen flying with Buffleheads near the same spot on 4 March and 7 April 1973.

We find particularly intriguing the Harlequin's apparent reluctance to leave the company of the Buffleheads. Could there be similarities of feeding habit which make it favorable for the bird to stay with the Buffleheads? Or do similar behavioral traits make it likely to associate with Buffleheads instead of Common Goldeneyes or Lesser Scaup, both at least as abundant on the New River as Buffleheads?

The frequent occurrence of interspecific flocking in birds, especially among closely related species, suggests that it is better for a stray individual of one species to associate with a flock of another than to feed alone. Among the obvious advantages would be food-finding and advance warning of predators.

As far as we can determine, this is the first record of the Harlequin Duck in Virginia west of Chesapeake Bay. Future scrutiny of groups of Buffleheads along southwestern Virginia rivers may indicate that Harlequin Ducks are of more frequent occurrence than previously suspected.

> Department of Biology and Division of Forestry and Wildlife Sciences, VPI & SU Blacksburg, Virginia 24061

MIGRATORY WATERFOWL ON A BATH COUNTY, VIRGINIA, POND Maurice Brooks

On 4 April 1973 Mrs. Brooks and I were following U. S. Route 220 from Monterey, Virginia, to Warm Springs, Virginia. On a pond of 3 acres or so about 15 miles north of Warm Springs we found an assemblage of water birds which seemed unusual for this mountain valley along the Jackson River. Species noted were as follows:

Horned Grebe, *Podiceps auritus:* 51 individuals, several of which were in process of changing to summer plumage.

Redhead, Aythya americana: 3 individuals, 2 of them males.

Ring-necked Duck, Aythya collaris: 8 individuals.

Bufflehead, Bucephala albeola: one pair.

Oldsquaw, *Clangula hyemalis:* 20 individuals, many in changing plumage. White-winged Scoter, *Melanitta deglandi:* one male.

This pond is in Bath County, not far from the Highland County line. On the following day there were no waterfowl of any kind on the pond.

> West Virginia University Morgantown, West Virginia 26506

GOLDEN EAGLES IN SOUTHWEST VIRGINIA Harold Toms and Sarah Cromer

On 14 January 1973 an adult Golden Eagle, *Aquila chrysaetos*, was seen from the westernmost fully wooded peak of Buckhorn Mountain, near Tazewell, Virginia. While hiking up the mountain, Mark Mullins, Mauricio Schrader, and Harold Toms heard a Red-tailed Hawk and stopped on the ridge to watch it. It was then that they noticed a large dark bird soaring above them on flat wings. Looking through 8x40 and 7x35 binoculars, they saw the Red-tailed Hawk soaring at the same height as the darker bird and could see immediately that the darker bird was much larger. Almost directly overhead, the dark wing linings could be seen, and when it wheeled, the white at the base of the tail could be seen as well as the brown terminal band. Toms, having seen eagles on several occasions while in the West, identified the bird as an adult Golden Eagle.

There have been reports of Golden Eagles in the Burkes Garden and Thompson Valley areas of Tazwell County but never this close to town.

On 20 January 1973 Robert L. Ake was in Tazewell County to see a Harris' Sparrow and decided to drive through the area where the eagles had been reported in Thompson Valley. He reported seeing one adult and one immature Golden Eagle here.

Robert Hooper of the Forest Service in Blacksburg reported seeing two Golden Eagles on several occasions in Tazewell County in the Roaring Fork section, which is near the Bland County line. His observations were also during January 1973. Southwest Virginia then seems to be the wintering area for two and possibly more Golden Eagles.

Tazewell, Virginia 24651

WHIMBRELS SURVIVE TRIAL BY WATER Charles R. Vaughn

Late in the afternoon of 17 May 1973 a cold front crossed the coast bringing strong winds and rain. About 6 p.m. EDT I was driving along Wallops Island, Virginia, and pulled up to the beach. At the particular location the road comes to an abrupt halt at the top of the dirt sea wall which protects the

island. About 4 feet below is the beach. As I approached the beach, 2 Whimbrel, *Numenius phaeopus*, were startled and flew out to sea. The wind was blowing straight out to sea at about 25 m.p.h. Since the wind had been onshore all day until the passage of the front, waves had built up and were about 2 to 3 feet high as they broke against the beach.

A few moments later a third Whimbrel started to fly but was caught by the wind and blown down into an oncoming wave. The bird completely disappeared as the wave washed over it. Several seconds later the bird surfaced and proceeded to fly straight out of the water and follow the previous 2 birds. As I sat watching with some surprise, a fourth Whimbrel flew from the beach and proceeded to be blown into an oncoming wave in a like manner. This fourth bird followed the third in flying directly out of the surf. It too headed out to sea following the others. Neither bird which was submerged appeared to have any difficulty flying as a result of its ordeal.

1306 Frederick Avenue, Salisbury, Maryland 21801

SOME AERIAL MANEUVERS OF THE COMMON RAVEN IN VIRGINIA

RICHARD N. CONNER, DWIGHT R. CHAMBERLAIN, AND VINCENT J. LUCID

Common Ravens, *Corvus corax*, are unique aerialists in that they have the characteristic flight of a passerine and the soaring and stooping capability of a *Buteo*. Courting pairs and flocks of immature Ravens sometimes give dynamic aerial displays. Typically, spectacular dives and ascents are observed. Birds are rarely seen executing complete rolls; half rolls are more commonly viewed.

On occasion, Ravens are observed carrying twigs, bark, or other objects in their claws or beak. They may flip the objects back and forth from beak to claw. In January 1973 a Raven was seen carrying a light-colored object that resembled a piece of bread in its bill. The object was dropped and fell about 40 feet before the Raven dove to retrieve it in its claws while doing a complete roll in the process. A week later 3 Ravens were observed where the lead bird dropped an object which fell within 25 feet of the tree line before being caught by the second Raven. The second Raven also dropped the object and the third Raven dove below the tree line in pursuit.

In February 1973 at Mountain Lake, Giles County, we observed pairs of Ravens performing an act usually characteristic of Golden Eagles. While flying one above the other, the lower bird of the pair flipped over and joined claws with its mate above. In one case the birds soared enjoined for only 2 seconds. During another observation, with possibly a different pair, the Ravens flew with claws grasped for about 10 seconds. No other body contact was observed on either occasion. These observations may raise speculation on aerial copulation by Ravens.

Department of Fisheries and Wildlife Sciences Virginia Polytechnic Institute and State University Blacksburg, Virginia 24060

BULLOCK'S ORIOLE IN GLOUCESTER Marvin L. Wass

Our second-floor balcony feeder at Gloucester, Virginia, plus its satellites of suet on tree trunks and corn meal-bacon fat mix stuffed into holes of a hanging log, has attracted a variety of birds over its decade of use, including the Redbreasted Nuthatch, Tree Sparrow, and Baltimore Oriole (twice). The 1972-73 winter differed in having more Purple Finches than ever before, up to 25 (17 males, 8 females) on 18 March.

However, no previous boreal tourists or tropical beggars could match the natty dude which caught my daughter Teresa's eye on the sunny afternoon of 29 December 1972. An obvious oriole, the lack of an all-black head and the very white wing patch flashed Bullock's Oriole, a variety we had never seen. A quick look in the field guide, *Birds of North America*, confirmed the guess. It stayed in a holly about 15 feet away for some 20 minutes, only briefly going to the suet tied to the tree. Transparencies taken then were poor, but my wife later took photographs of it in the feeder. These went to F. R. Scott who forwarded them to Chandler Robbins. Both confirmed the identity, and Robbins wished for as good a record for Maryland.

The oriole reappeared on 11 January 1973 but did not feed. On 14 February it was back and seen almost daily to the end of the month. March was damp and almost sunless through the 11th. The oriole preferred the log mix but did eat some peanut butter. (Dave Roszell's strawberry jam suggestion was never tried.) It was done with the sun's return and we wished it westward ho, so I was astonished to come home from work on 18 April and hear from my children, Gerald, Teresa, and Barry, that it had been back.

Oriole rumors were rife in this period. Someone a half mile away said he had a Baltimore Oriole every day. Mrs. Richard Harper saw a "Baltimore Oriole" with conspicuous white on the wings on 1 April. It stayed in a crepe myrtle most of the forenoon. The Bullock's Oriole was likely the one seen about 20 December at a feeder on our street in Gloucester Courthouse, and it was seen by at least three other families in town during the winter.

This oriole, *Icterus galbula bullockii*, is now considered, along with the Baltimore Oriole, *I. g. galbula*, a subspecies of the Northern Oriole, a sad name change for a regal bird. A hasty perusal of some recent Christmas bird counts found the Bullock's Oriole most often seen in California, Texas, Louisiana, or Florida, if two or more were recorded. If no more than one was seen anywhere, then Massachusetts (3 areas), Rhode Island, New York, and New Jersey occasionally slipped in. Most of these records, however, were of immature birds, which some ornithologists feel are not separable in the field from the eastern race (see *Raven*, 41: 55, 1970). The Gloucester bird, however, was a magnificent adult male and the first confirmed record of this race from Virginia.

Box 752, Gloucester, Virginia 23061

A WHITE-WINGED JUNCO—MY BIGGEST GOOF DOROTHY L. MITCHELL

On 22 November 1972 at my home in Newport News, Virginia, I went out to the bird traps to band and release the birds that were caught. It was snowing

and getting colder by the minute, and I was in a hurry to get ready to go shopping for a trip away for the weekend. Two White-throated Sparrows, a Cardinal, a towhee, and a junco were removed from the traps and put into a gathering cage.

I banded the sparrows first, then the Cardinal and towhee, and reached into the cage for the junco. The bird seemed large, and for a moment I forgot what I had put into the cage. As I was banding the junco, I noticed the extra whiteness in the tail as the bird lay in my hand, and when I measured the wing (80 mm), those two white wing bars really caught my eye, as did the light margins on its secondaries. Nevertheless, it was very cold, and I talked myself out of taking a picture, assuring myself that it was just a regular Slatecolored Junco. As the bird flew off, the tail looked as if it was white with a black streak in the center, and I knew I had made a mistake.

When I opened Chan Robbins's book and looked up the juncos, there it was, the White-winged Junco, *Junco aikeni*, and the book mentioned the three main things that I noticed as I was holding the bird. I realized too late that I should have taken pictures by the dozen!

The White-winged Junco is now considered a subspecies of the Dark-eyed Junco and has been given a new scientific name, *Junco hyemalis aikeni*.

596 Harpersville Road, Newport News, Virginia 23601

HARRIS' SPARROW IN TAZEWELL COUNTY MRS. W. B. LESLIE, LOUISE LESLIE, AND SARAH L. CROMER

On 29 December 1972 a Harris' Sparrow, Zonotrichia querula, was observed in the feeder area around the home of Mrs. W. B. Leslie and her daughter, Louise, in Tazewell, Virginia. Mrs. Leslie and Louise first noticed the larger size of the sparrow, comparing it with the White-throated and White-crowned Sparrows that came to their yard. Next the pink bill and the black bib and crown were observed. The streakings on the sides could be seen clearly. After checking their field guides, the Leslies announced their find to the Clinch Valley Bird Club.

On 13 January 1973 Richard H. Peake and a group from Wise, Virginia, visited the Leslies and verified the bird to be a Harris' Sparrow. Then he added that it was a first-year bird since the black bib and crown were not uniformly black but somewhat scaly, and the area around the eye and side of the head was buffy instead of gray.

The Leslies were visited on 20 January 1973 by a group from Norfolk that included Robert L. Ake, W. W. Fogleman, and Joe Davis. Ake agreed with Peake that it was a first-year bird. He suggested that we watch the bird carefully for any changes in the plumage.

The sparrow came daily for 78 days and 43 or more people visited the Leslies to see and photograph the bird. By 1 March the bib and crown had gotten blacker and sides of the head were not as buffy as they were in January. The last day the bird visited the feeder was 16 March 1973.

We know that Harris' Sparrow has been recorded in the eastern United States on many occasions and in Virginia more than once, but this surely is the longest recorded stay in Virginia.

Tazewell, Virginia 24651

VSO EASTERN SHORE FIELD TRIP Walter Post Smith

As we drove up the long Eastern Shore peninsula Friday afternoon, 17 August 1973, heading for Wachapreague, we noted quite a few Cattle Egrets in the fields but saw no signs of hoped-for Upland Sandpipers, and our thoughts raced ahead to what tomorrow might bring.

We arrived at the hotel in time for dinner and a renewal of many friendships from all over the state. Approximately 30 persons were staying at the hotel, with an additional 15 staying at nearby camps or motels, all scheduled for the next day's trip. After dinner there were the usual strolls around the marina and brilliant discussions on the third floor porch before we wandered off to bed, secure in the knowledge that the weathermen were predicting a good weekend.

Morning, however, brought the disappointing discovery of leaden skies that were just starting to drip, and the realization that those weathermen had blown it completely. I remember thinking, as we sat down to breakfast, "What a shame—there probably won't be 15 people on the barge trip!" But, as I'm sure most of you know, birdwatchers in search of unusual species are exceeded in zeal only by duck hunters during a winter northeaster. As we assembled at the VIMS pier, I watched in amazement as a full complement of about 45, decked out in all manner and color of rain gear, boarded the barge.

As we wound slowly out through the twisting channel, we began to see the usual Whimbrels, peering above the marsh grass or wheeling away at our approach. The northeast winds and resulting high tides, which completely covered the channel banks and mud flats, restricted our views of rails and shore-birds on the trip out.

The old water tower on Club Point loomed ahead and we soon were trooping ashore to visit the heronries of the Louisiana Heron, Snowy Egrets, and Glossy Ibis. We found only a few late nesters of these species, and Mitchell Byrd informed us that their nesting was both early and in fewer numbers than normal this year. We did, however, get good views of Willets, Oystercatchers, Forster's Terns, Laughing Gulls, Sharp-tailed and Seaside Sparrows, and even a Yellowthroat and Prairie Warbler. Most of the group were rewarded by being able to examine closely an unusual young Least Bittern. As we "walked the plank" back aboard the barge, there were no complaints about wet socks, for by this time we were, quite literally, wet from top to bottom.

Next we headed out to Dawson's Shoals with the hope of seeing a nesting colony of Royal Terns, but upon arriving, Capt. Terry's opinion was that the high, rough water precluded our landing there. Obviously, any Royal Tern colony would have recently suffered heavy flooding and was probably wiped out. Se we returned to the southern tip of Cedar Island for an early lunch on the barge.

After lunch we went ashore on Cedar Island and started the long trek up the ocean beach. As we strolled along "peeps" skittered up off the beach, Least Terns screamed overhead, and we found occasional late nests of Black Skimmers. Many of the group started the usual collections of shells, sand dollars, and driftwood, and it was at this point that I discovered my "prize." It proved to be a trawl float, about 8 inches in diameter, of some extremely light metal,

inscribed with the words "manufactured in Grimsby, England." I stoutly maintain that it floated all the way across the Atlantic Ocean and came ashore on Cedar Island at my feet. Having been toted over much of Cedar Island, it now resides on my back porch and must certainly be destined for some important use!

We finally crossed to the "land" side of the island and there encountered a large mud flat, teeming with shorebirds. There were Least and Semipalmated Sandpipers, Dunlin (in breeding plumage), Short-billed Dowitchers, Ruddy Turnstones, and Piping, Semipalmated, and Black-bellied Plovers, but we searched in vain for godwits or avocets.

Our next move was to wade through a tidal marsh to get to the boat returning us to the barge. As the water crept up from ankle to mid-calf, to knee, to mid-thigh, I thought I might have to use my float for personal safety—but we finally made it! Back on the barge most of us were content to sink gratefully down on a bench for the trip back to the hotel. Some of the group shared leftover sandwiches with the Laughing Gulls and thoroughly enjoyed that marvelous agility with which they catch tossed tidbits in midair.

We got back to Wachapreague shortly after three and, in spite of dripping skies which hampered use of binoculars, the group expressed unanimous appreciation to Mike Castagna and Capt. Terry for an enjoyable day. We had a rousing "happy hour" that evening before dinner, at which we settled most of the world's problems, relived the day's experiences, and speculated on the unusual species that "got away."

Sunday morning we awoke to broken clouds, and by the time 35 of us gathered at Fisherman Island, we had bright sunshine for the mosquitory trek down to the beach. A walk of several miles up the beach produced some exciting Sandwich Terns, large flocks of Black Skimmers, many of which were still nesting, as well as Ospreys, Broad-winged and Red-tailed Hawks, Gull-billed, Common, and Royal Terns, Herring and Black-backed Gulls, and Tree and Barn Swallows.

We straggled back to our cars about noon and, as we made our various farewells and started back across the Chesapeake Bay Bridge-Tunnel complex, it was with a sense of gratitude for another delightful, well-conducted VSO field trip.

3009 Chesapeake Avenue, Hampton, Virginia 23661

REVIEW

There's a Seal in My Sleeping Bag. By Lyn Hancock. Alfred A. Knopf, New York, 1972: 292 pages, maps and photographs. Price, \$6.95.

How do Vancouver Island and the Pacific coast of British Columbia grab you? They'll become as familiar as your circle for the midwinter bird count if you explore about 1500 miles of American and Canadian coastline with Lyn Hancock and her husband David. And you'll probably start planning your next extended junket in that direction.

How well up are you on sea otter, elephant seal, Steller's sea lion, and their several relatives? or the wide variety of alcids on the Canadian Pacific? Do you really know about the nesting, hunting, and feeding habits of the murre, puffins, cormorants, gulls, Peregrine Falcon, and Rhinoceros Auklets? How'd you like the straight story of the deleterious effects of the oil spills in the Channel Islands off the California Coast? Do you have a budding or amateur naturalist on hand who couldn't be enticed to read those heavy tomes in the library to learn what he needs to know? Solve all the aforementioned problems with this book.

Here is a plethora of information interlarded with chuckles galore. Here are personal experiences that are exciting, frightening, tantalizing, and touching, as you go with the writer from squatting in terror in the middle of a Bald Eagle eyrie high atop a giant evergreen, to being sloshed around in a diminutive dinghy by a pod of killer whales, to climbing Murre Rock "body bare from the waist up," to attempting to sleep hanging on the ragged rocks of Solander Island.

It's the story of the first seven years of wildlife exploration and study by David Hancock and his wife, which began the day they met and continued right through their honeymoon. You'll admire "never-at-a-loss" David on his ornithological odyssey and envy his "seven years with the right woman."

The maps are needful, helpful, and enticing. The pictures complement the story. Indeed just about everything about this book is good. Except the silly title and the rather foolish book jacket. But don't let that turn you off; "it's what's inside that counts."

Turner N. Clinard

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NEWS AND NOTES

Compiled by F. R. Scott

HUNTING SEASON FOR CROWS. Under pressure from federal authorities the Virginia Commission of Game and Inland Fisheries established the first formal hunting season for crows in Virginia. This is a split season and runs from 1 August through 30 September 1973 and 1 December through 31 January 1974. Although a state hunting license is required, there are no bag limits, no hunting hour restrictions, no restrictions against the use of electronic calls, and there is apparently no distinction made between the Common Crow and the Fish Crow, except in one matter. The way the federal law reads, the Common Crow (but not the Fish Crow) may be taken outside the established hunting season if it is found "committing or about to commit depredations" on crops, trees, wildlife, or livestock. Since this is considered to be normal activity for crows, it would seem that enforcement of the state regulation would be difficult if not impossible.

A VSO member, Dwight R. Chamberlain, who is considered the foremost expert on crows in Virginia, was instrumental in proposing the split hunting season so as to protect the birds during their nesting season. Although the Game Commission was reluctant to set a formal crow season, pressure from federal authorities forced them to act or take the chance that the crow, which has had no legal protection heretofore, would be totally protected. The problem arose out of the signing of an amendment to the Migratory Bird Treaty Act on 9 March 1972 extending federal protection to many other bird species (*Raven*, 43: 35, 1972). PAGE 106

HORNED GREBE CONCENTRATION. According to C. R. Vaughn, there was a large movement of Horned Grebes into the Chincoteague, Virginia, area in January 1973. In the Toms Cove section of Assateague Island, he recorded 1100 on 21 January, 1400 on 25 February, and 1200 on 3 March 1973. These were undoubtedly minimum counts, since the observations were made from the shore line alone. On the Christmas count here on 28 December 1972 only 160 Horned Grebes were recorded in spite of good boat coverage of Toms Cove as well as the other water areas in the count circle. Vaughn noted a similar but smaller buildup of Horned Grebes in this area in the late winter of 1972. The only higher count from the Chincoteague area seems to be 1703 recorded here 29 December 1955 (*Raven*, 27: 2, 1956).

EARED GREBE AT CRANEY ISLAND. Gilbert S. Grant carefully observed an Eared Grebe at Craney Island, Portsmouth, Virginia, on 21 December and 2 on 26 December 1972. On both occasions the birds were compared with nearby slightly larger Horned Grebes and had the typical ear patches, darker coloration, upturned bill at tip, and different slope of head.

HARLEQUIN DUCKS IN CHESAPEAKE BAY. For the sixth consecutive year Harlequin Ducks wintered around the rocky artificial islands of the Chesapeake Bay Bridge-Tunnel between Kiptopeke and Virginia Beach, Virginia. The earliest observation was of one on the very early date of 24 October 1972 (M. A. Byrd), and there were several observations of a pair during November. Up to 3, at least 2 males and 1 female, were seen numerous times throughout the winter by many observers, and the latest report was of 3 on 10 March 1973 (W. W. Fogleman and R. L. Anderson).

ESCAPED CARACARA AT HAMPTON. A Caracara, *Caracara cheriway*, was seen at the trash dump at Fort Monroe, Virginia, on 27 January 1973 by Dorothy Mitchell and Ann, Lisa, Lori, and Lucy Talbot. The bird, which was feeding on the ground, was in beautiful adult plumage with brilliant white head and neck, big black crest, red face patch, and blue bill. Unfortunately, the bird had left when the observers returned after calling other birdwatchers. It was only later that it was learned that two Caracaras had escaped from the Norfolk Zoo in July 1972, and this was almost surely one of these birds. This species's natural range in the East is confined to central and southern Florida.

EARLY BROAD-WINGS AT CLIFTON. James W. Eike watched a very early pair of Broad-winged Hawks at his home near Clifton, Fairfax County, Virginia, on 27 February 1973. One circled overhead calling loudly for about 10 minutes while the other one sat in a nearby tree. A single Broad-wing was also seen here 2 March.

RUFFED GROUSE IN GOOCHLAND COUNTY. On 28 January 1973 C. E. Stevens and Bruce Davenport flushed a Ruffed Grouse in western Goochland County along Byrd Creek, probably the easternmost record for southcentral Virginia. The site was a small hemlock grove, a tree virtually unknown in the wild this far east in the state.

WOODCOCK NEST IN MATHEWS. Marvin L. Wass found an American Woodcock nest with 5 eggs in Mathews County, Virginia, on 16 March 1973. Although the nest was only 20 feet from a new house, it was only visible when surrounded by snow one morning. Wass believed that only 3 young were fledged from this nest.

DECEMBER 1973

THE RAVEN

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