

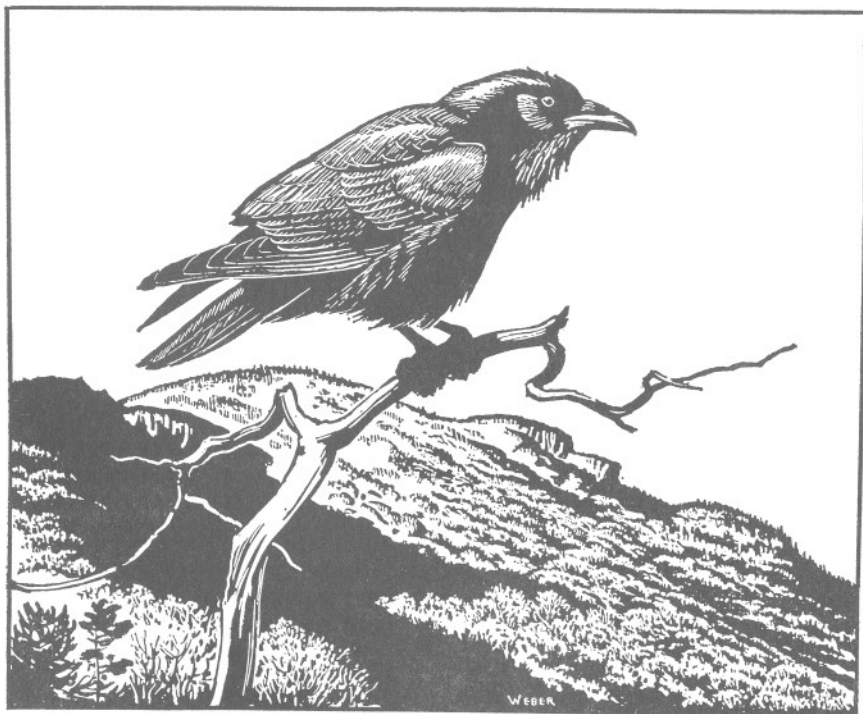
# The Raven

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

Activities undertaken by the Society include the following:

1. An annual meeting (usually in the spring), held in a different part of the state each year, featuring talks on ornithological subjects and field trips to nearby areas.
2. Other forays or field trips, lasting a day or more and scheduled throughout the year so as to include all seasons and to cover the major physiographic regions of the state.
3. A journal, *The Raven*, published 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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## VIRGINIA CHRISTMAS BIRD COUNTS—1971-72 SEASON

F. R. SCOTT

In recent years the Christmas bird counts have experienced a tremendous growth in Virginia, with new records being set virtually every year. While the number of counts submitted to *The Raven* has stabilized at 23 to 26 in recent years, the average coverage of each has increased greatly. This growth is shown dramatically in Table 1 for the past 10 years. The only years in which the number of observers was less than the previous year, 1966 and 1968, unusually bad weather during the count periods was possibly a big factor. This year's totals of 214 species found by 342 different observers in 1551 party-hours in the field surpass all previous figures. Since many observers participated in more than one count, there are actually 468 names listed in the count data accompanying this summary.

The increase in total species reported almost every year is undoubtedly due largely to the increased coverage of the various count areas. In the 10-year period noted in Table 1, individual participation in the counts has increased 114%, and the number of party-hours, the real measure of coverage, has increased 130%. It should also be noted, however, that a lot of this increased coverage has occurred in eastern Virginia, where the combination of more varied habitats and milder weather results in a much higher number of species than in count areas in western Virginia. Thus, if our most productive count—Cape Charles—had been cancelled this year, the species total of 214 would have been reduced by 12. By contrast, Blacksburg, our count with the best coverage west of the Blue Ridge, had only one species not recorded elsewhere. Another factor in the increased species total which cannot be overlooked is the mild fall and early winter of each of the last 2 years, which encouraged many birds to linger over the Christmas count period instead of moving farther south earlier. Clearly, this increase in species totals cannot be expected to continue indefinitely.

Five species are apparently new to Virginia Christmas counts this year—White Pelican, Little Gull, Chuck-will's-widow, White-eyed Vireo, and Black-poll Warbler—and the cumulative list of all state Christmas counts now contains 261 species. Many counts had record totals this season; six reported over 100 species and three others over 90. Cape Charles, with 180 species, had the all-time record for a Virginia count as well as the highest total this season on the entire East Coast except for Cocoa, Florida. This was seven species higher than the record set by Cape Charles in 1970. Only 3 years ago, the record was 157, also set by Cape Charles. The best coverage was attained by Chincoteague with 144 party-hours, followed by Cape Charles with 135, Fort Belvoir with 132, Back Bay with 110, Blacksburg with 93, and Lynchburg with 91.

Overall the weather was excellent during the count period, although those who made their counts on December 18 had to contend with strong northwest winds following passage of a cold front across the state. No snow was reported, either falling or on the ground, and only seven counts reported any rain, most of this being light or limited in extent. Only Mt. Rogers-Whitetop had "unacceptable" weather for a count with 20-30 m.p.h. winds, light rain and sleet, and fog. Small wonder this count listed only 42 birds of 10 species! The effects of the warm December weather preceding the Christmas count period are clearly evident in the increased wintering numbers of many ground-feeding birds,

particularly inland where snow and ice conditions often encourage them to move farther south.

The count tabulation given in Table 2 is more or less in order of distance inland from the coast. Counts 1-9 were all on the Coastal Plain, with 1-4 being on the coast proper 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.

Pelagic birds were in good numbers, with outstanding counts including 292 Red-throated Loons at Chincoteague and 566 Horned Grebes at Cape Charles. Four Horned Grebes and 11 Pied-billed Grebes at Roanoke were excellent for this inland area, a clear indication of the lack of ice inland. A White Pelican at Chincoteague, present since August, was a first record for a state count, while a Great Cormorant at Cape Charles was only the second Virginia count record. Wintering herons and ibis broke many records, two of the best reports being 84 Louisiana Herons at Cape Charles and 32 Glossy Ibis at Chincoteague. Single Green Herons were reported at Cape Charles and far inland at Lexington, and a Black-crowned Night Heron on the new Wise County count was a real oddity.

Among the many waterfowl reported at Roanoke were 5 Whistling Swans, very rare in southwestern Virginia, and an unprecedented 50 Blue-winged Teal. This latter species was also reported inland at Brooke, Warren, and Darlington Heights as well as on three of the extreme southeastern Virginia counts. Although in general the mild weather held down the numbers of many waterfowl along the coast and Chesapeake Bay, there were a few good totals reported, including 11,550 Whistling Swans, 27,300 Snow Geese, and 52,000 American Widgeon at Back Bay, 11,920 Surf Scoters and 1,417 Red-breasted Mergansers at Cape Charles, and 1,250 Red-breasted Mergansers a few miles across Chesapeake Bay at Little Creek. Four Common Eiders were reported at Little Creek, a King Eider at Chincoteague, and an unidentified one at Cape Charles.

The Warren count listed unusual totals of 227 Turkey Vultures and 221 Black Vultures. Only 1 Turkey Vulture was found at Cape Charles versus 203 in 1970, an indication of the population variations to be expected at the end of a long peninsula. The Red-shouldered Hawk continued its fast decline as a wintering bird in relation to the Red-tailed Hawk. This year there were 181 Red-tails versus 36 Red-shoulders; last year the comparable figures were 178 and 50. A Broad-winged Hawk at Roanoke was only the third recent accepted state count record, other having been rejected for lack of substantiating details. It is unfortunate that observers have not furnished more details on their observations of this species, which normally does not winter regularly anywhere in the United States. Rough-legged Hawks were reported only at Chincoteague and inland at Waynesboro, and an Osprey was seen at Back Bay. A Black Rail at Cape Charles was the third record for a state count, and Back Bay reported a remarkable 47,500 American Coots. Common Gallinules were found on all four of the coastal counts, and Hopwell had 5, an unprecedented inland total.

Shorebirds were in their usual good numbers along the coast. Some of the more interesting totals included 15 Willets and 19 Marbled Godwits at Chincoteague, 11 Whimbrels and 36 Marbled Godwits at Cape Charles, 49 Common Snipe at Newport News, 16 Least Sandpipers at Hopwell, and 35 Common Snipe far inland at Blacksburg. American Woodcock wintered in good numbers, with interesting inland counts of 9 at Hopwell and 11 at Brooke. One was



TABLE 1. *Growth of Christmas counts in Virginia for the past 10 years. The figures are based only on those counts printed in The Raven.*

<i>Year</i>	<i>Number of Counts</i>	<i>Total Species</i>	<i>Total Party-hours</i>	<i>Number of Different Observers</i>
1962	16	171	675	160
1963	19	171	733	169
1964	18	165	823	215
1965	26	185	1030	251
1966	23	186	1085	234
1967	25	189	1046	240
1968	23	189	1003	217
1969	25	190	1148	276
1970	25	206	1332	301
1971	26	214	1551	342

even recorded near the crest of the Blue Ridge at Peaks of Otter. Single Spotted Sandpipers were seen at Cape Charles and Roanoke.

An unidentified jaeger at Back Bay was late, and an Iceland Gull at Little Creek was the only white-winged gull reported. A Ring-billed Gull at Roanoke was interesting, as winter reports of *any* gulls in Virginia west of the Fall Line are few and quite local, usually confined only to the larger reservoirs. Other gull reports of interest were a Black-headed Gull at Little Creek, the third Virginia count record, several Little Gulls at Little Creek and Back Bay, the first and second records for a state count, and 2 Black-legged Kittiwakes at Back Bay, a second record. Little Creek's 7,100 Bonaparte's Gulls may have been a record winter count for the state. Single Common Terns were found at Chincoteague and Newport News, while Royal Terns were reported on all four of the coastal counts plus Newport News. A murre at Chincoteague was thought to be a Common Murre, which, if confirmed, would have been a new bird for Virginia.

Many owls were reported over the state. Of particular interest were 4 Barn Owls at Hopewell, and Cape Charles came up with the only reported Long-eared and Saw-whet Owls. A Chuck-will's-widow at Chincoteague was the first Virginia count record, although another was seen the next day at nearby Ocean City, Maryland. Red-headed Woodpeckers wintered in numbers again with 75 reported on 14 different counts, and Yellow-bellied Sapsuckers continued their slow increase as a wintering bird. This year they were recorded on 23 of the 26 counts with peak totals of 23 at Hopewell and 22 at Charlottesville. Five Red-cockaded Woodpeckers at Back Bay were the first appearance of this bird on a state Christmas count since 1967. An Eastern Kingbird at Mathews was only the second count record for Virginia, the only other record being in 1958 at Back Bay, whereas the 2 Western Kingbirds at Cape Charles were Virginia's fifth count record. The 46 Eastern Phoebe reported on 19 counts was the highest total for over 10 years, indicating a slow but steady comeback for this species.

Some 105 Red-breasted Nuthatches were found on 16 counts, helped along by 41 at Cape Charles, a decided increase over 1970 when only 38 on 10 counts were recorded. The 171 Brown-headed Nuthatches at Chincoteague were a

TABLE 2. The 1971-72 Christmas bird counts in Virginia. Figures underlined indicate an unusual species or an unusual number of individuals for that particular count. Items marked with an asterisk (\*) are commented on further under count summaries.

	1. Chicotteague	2. Cape Charles	3. Little Creek	4. Back Bay	5. Newport News	6. Mathews	7. Hopewell	8. Brooke	9. Fort Belvoir	10. Charlottesville	11. Warren	12. Darlington Heights	13. Sweet Briar	14. Lynchburg	15. Hockingham Co.	16. Big Flat	17. Augusta Co.	18. Waynesboro	19. Lexington	20. Peaks of Otter	21. Henric	22. Blackburg	23. Mt. Rogers-Whitetop	24. Glade Spring	25. Nickelsville	26. Wise Co.
Date	12/28	12/27	12/31	12/29	12/18	1/2	12/18	12/20	12/19	1/2	12/19	12/18	12/29	12/31	12/18	12/26	12/22	12/27	12/21	12/20	12/18	12/28	12/26	12/28	12/26	12/18
Common Loon	273	42	10	8	1	44	...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ned-throated Loon	292	57	44	218	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Loon sp.	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ned-necked Grebe	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Horned Grebe	171	266	137	33	20	80	...	1	2	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...
Pied-billed Grebe	82	59	92	170	25	16	2	1	2	3	...	2	...	5	1	2	1	1	...	...	11	4	...	2	2	1
White Pelican	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gannet	5	42	167	73	2*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Great Cormorant	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Double-crested Cormorant	...	18	24	32	19	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Great Blue Heron	169	82	62	36	5	28	33	27	49	2	2	...	...	2	1	...	1	...	1*	...	1	1	...	1	...	...
Green Heron	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Little Blue Heron	45	28	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cattle Egret	...	4*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Egret	115	23	40	35	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Snowy Egret	14	55	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Louisiana Heron	70	84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black-crowned Night Heron	70	29	11	206	...	4	...	...	...	...	...	...	...	...	...	...	1*	...	...	...	...	...	...	...	...	1*
American Bittern	9	4	1	12	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glossy Ibis	22	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whistling Swan	768	13	...	11,550	4	56	...	33	1	...	...	...	...	...	...	...	...	...	...	...	2*	...	...	...	...	...
Canada Goose	1690	2551	13	7650	...	54	7500	250	81	59	97	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brant	1481	2712	3000	3	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Snow Goose	7100	78	...	27,300	...	...	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blue Goose	2	...	...	22	...	...	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mallard	1216	143	334	2000	41	62	2483	13	407	185	109	...	...	6	21	...	29	10	...	...	25	4	...	80	...	...
Black Duck	4989	392	70	1500	50	8	3421	150	671	46	20	...	...	4	15	...	...	...	...	...	75	...	...	36	...	1*
Gadwall	201	119	...	2350	18	...	...	10	5	...	...	...	...	...	15	...	...	...	...	...	1	...	...	...	...	...
Pintail	1880	128	...	1100	...	...	...	800	2	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Green-winged Teal	1665	60	16	167	4	...	28	...	2	...	15	...	...	2	...	...	...	...	...	...	2	...	...	...	...	...
Blue-winged Teal	...	...	5	30	4	...	...	2*	...	...	1	1*	...	...	...	...	...	...	...	...	50*	...	...	...	...	...
American Widgeon	299	695	50	52,000	942	...	92	4	7	...	1	...	...	...	188	...	...	...	...	...	1	6	...	...	...	...
Shoveler	958	31	20	355	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	4	...	...	...	...
Wood Duck	...	9	14	3	4	...	678	2	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...
Redhead	4	2	...	6	5	2	...	52	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ring-necked Duck	...	3	200	11	2	6	56	1	...	...	3	1	...	5	8	...	...	...	...	...	...	1	...	...	...	...
Canvasback	4	...	32	171	621	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Greater Scaup	16	1	...	11	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lesser Scaup	43	6	18	1	177	...	...	56	148	...	2	...	...	...	...	...	...	...	...	...	...	18	...	...	...	...
Scaup sp.	...	12	...	...	...	8	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Common Goldeneye	125	141	38	2	308	480	...	4	10	...	1	...	...	...	...	...	...	...	...	14	...	...	...	...
Bufflehead	416	2931	48	5	74	672	14	3	54	...	9	...	...	...	...	...	...	...	11	15	...	...	...	...
Oldsquaw	347	272	90	1	17	20	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Eider	...	...	4*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
King Eider	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eider sp.	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
White-winged Scoter	60	299	4	...	8	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Surf Scoter	482	11,920	20	35	80	434	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Scoter	254	1078	7	20	23	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ruddy Duck	554	30	23	621	145	42	3	50	179	1	4	...	...	...	...	...	...	...	1	...	...	...	...	...
Hooded Merganser	27	57	41	1	1	...	4	2	21	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Merganser	1	14	16	4	...	3	82	150	61	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
Red-breasted Merganser	511	1417	1250	426	20	303	...	3	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Turkey Vulture	149	1	3	30	4	12	27	39	2	48	227	44	8	20	75	20	66	46	13	...	8	47	16	11
Black Vulture	2	...	7	4	1	...	20	6	...	1	221	5	6	7	128	109	5	3	2	...	6	29	1	2
Sharp-shinned Hawk	9	9	3	7	1	...	...	1	1	1	2	...	1	...	...	2	2	...	...	...	1	...	...	...
Cooper's Hawk	...	3	1	2	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Accipiter sp.	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...
Red-tailed Hawk	21	18	14	7	4	3	15	8	11	11	10	9	2	6	2	5	7	6	2	1	3	6	1	4
Red-shouldered Hawk	6	2	5	8	1	...	4	3	4	...	...	1	...	1	...	...	...	...	...	...	1	...	...	...
Broad-winged Hawk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1*	...	...	...	...
Rough-legged Hawk	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bald Eagle	3	...	2	...	...	1	4	6	...	...	...	...	...	...	...	...	...	...	...	1*	...	...	...	...
Marsh Hawk	58	62	3	30	4	7	6	3	1	...	2	...	...	...	...	5	1	...	...	1*	...	...	...	...
Osprey	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Peregrine Falcon	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pigeon Hawk	3	5	1	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1*	...	...	...	...
Sparrow Hawk	79	100	67	139	25	36	12	14	10	17	9	9	...	3	8	1	3	5	7	1	10	4	...	3
Ruffed Grouse	...	...	...	...	...	...	...	...	...	...	6	...	...	4	14	...	2	2	4	2	6	2	...	...
Bobwhite	253	298	57	105	31	32	78	72	54	96	72	11	8	34	15	8	21	41	37	9	78	36	...	2
Japanese Green Pheasant	...	7*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ring-necked Pheasant	...	...	1*	...	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	...	...	...	1
Turkey	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
King Rail	1	13	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Clapper Rail	13	152	18	...	3	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Virginia Rail	3	18	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sora	...	10	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black Rail	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Gallinule	1	7	2	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
American Coot	468	166	88	47,500	54	...	50	...	2	3	...	...	...	...	17	...	...	...	...	41	...	...	25	1*
American Oystercatcher	125	210	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Semipalmated Plover	...	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Piping Plover	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Killdeer	11	26	14	353	137	11	35	35	70	...	3	...	5	28	1	38	25	2	...	69	62	...	1	3
Black-bellied Plover	425	521	11	1	13	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ruddy Turnstone	40	39	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
American Woodcock	7	43	5	14	...	6	2	11	1	1	2	...	...	1	...	...	...	...	...	1*	...	...	...	...
Common Snipe	18	18	2	51	42	1	2	5	3	1	3	...	2	...	2	...	2	4	2	...	3	35	...	1
Whimbrel	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spotted Sandpiper	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1*	...	...	...	...

	1. Chicoteague	2. Cape Charles	3. Little Creek	4. Back Bay	5. Newport News	6. Mathews	7. Hopewell	8. Brooke	9. Fort Belvoir	10. Charlottesville	11. Warren	12. Arlington Heights	13. Sweet Briar	14. Lynchburg	15. Rockingham Co.	16. Big Flat	17. Augusta Co.	18. Waynesboro	19. Lexington	20. Peaks of Otter	21. Roanoke	22. Blacksburg	23. Mt. Rogers-Whitetop	24. Glade Spring	25. Nickelsville	26. Wise Co.
Date	12/28	12/27	12/31	12/29	12/18	1/2	12/18	12/20	12/19	1/2	12/19	12/18	12/29	12/31	12/18	12/26	12/22	12/27	12/21	12/20	12/18	12/28	12/28	12/26	12/26	12/18
Willet	15	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Greater Yellowlegs	47	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lesser Yellowlegs	46	37	...	...	2*	...	...	...	2*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Knot	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purple Sandpiper	...	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Least Sandpiper	18	5	...	...	...	...	16*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dunlin	7922	14,336	330	53	89	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Short-billed Dowitcher	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dowitcher sp.	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Semipalmated Sandpiper	23	17	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Western Sandpiper	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
"Peep" sp.	...	158	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Marbled Godwit	19*	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sanderling	515	643	760	212	196	44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jaeger sp.	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Iceland Gull	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Great Black-backed Gull	578	850	440	112	74	133	64	61	78	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Herring Gull	4793	8421	2700	1200	1305	718	142	150	2243	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ring-billed Gull	1964	5228	6300	800	339	261	273	105	1868	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Black-headed Gull	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Laughing Gull	2	1	48	11	30	17	3*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bonaparte's Gull	103	64	7100	592	231	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Little Gull	...	...	2*	5*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black-legged Kittiwake	...	...	...	2*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Forster's Tern	80	3	252	124	19	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Tern	1*	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Royal Tern	2	11*	53	7	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black Skimmer	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurrie sp.	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mourning Dove	392	594	234	125	339	41	199	260	626	265	642	109	72	176	116	...	89	82	102	8	204	446	...	78	81	7
Barn Owl	...	3	...	...	...	...	4*	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	1	...	...
Screech Owl	15	27	5	15	...	1	3	...	2	1	1	...	...	9	...	...	...	2	...	...	...	...	...	...	2	4
Great Horned Owl	9	13	8	4	...	1	1	1	11	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Barred Owl	...	1*	3	14	...	...	1	...	10	1	...	...	...	...	2	2	...	...	...	...	2	...	...	...	...	4
Long-eared Owl	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Short-eared Owl	1	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saw-whet Owl	...	2*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chuck-will's-widow	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Belted Kingfisher	53	36	30	18	9	34	4	17	13	13	10	3	1	6	4	...	3	3	10	1	5	8	...	8	4	6
Yellow-shafted Flicker	302	235	192	150	55	130	85	58	103	48	37	25	11	48	2	1	4	1	11	9	6	4	...	4	7	6
Pileated Woodpecker	3	1	21	16	...	...	8	16	20	26	12	11	4	17	3	8	2	12	12	13	4	7	...	3	3	5
Red-bellied Woodpecker	49	35	143	41	12	30	50	83	136	56	24	31	9	64	7	4	5	12	15	13	3	12	...	...	4	2
Red-headed Woodpecker	21	3	10	3	2	...	5	2	3	...	...	1	1	7	8	...	...	...	1	...	...	10	...	...	...	...
Yellow-bellied Sapsucker	7	5	6	9	4	3	23	19	21	22	13	8	13	16	2	4	...	2	3	4	7	2	...	2	...	3
Hairy Woodpecker	20	25	12	9	...	4	13	2	15	3	8	2	...	16	1	4	3	10	6	4	6	3	2	...	11	3

Downy Woodpecker	61	52	53	41	12	26	51	50	181	49	48	24	24	88	23	27	20	32	18	35	31	60	...	7	5	57
Red-cockaded Woodpecker	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern Kingbird	...	...	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Western Kingbird	...	2*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern Phoebe	4	5	1	2	1	2	3	...	1	3	1	5	1	4	...	...	...	...	3	1	...	3	...	...	...	1*
Horned Lark	77	154	...	...	9	...	24	25	...	18	...	80	...	5	120	...	25	3	31	...	25	...	...	...	...	...
Tree Swallow	325	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blue Jay	112	33	199	55	47	109	84	290	474	212	225	107	45	266	46	16	87	113	171	58	147	304	...	75	41	55
Common Raven	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1*	18	1	5	...	1	3	3	4	...	...	...
Common Crow	242	77	225	284	184	432	219	130	307	450	334	172	150	204	231	21	3136	384	232	62	332	327	4	85	675	284
Fish Crow	121	30	85	81	6	25	...	8	39	11	...	...	...	...	50	...	3	8	...	...	...	...	...	...	...	...
Black-capped Chickadee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	36	...	...	...	...	...	...	8	...	...	...	...
Carolina Chickadee	149	334	176	197	49	86	187	160	641	184	129	82	33	375	38	82	51	91	70	54	189	200	2	13	62	84
Tufted Titmouse	72	28	46	34	19	37	39	61	327	89	24	28	19	200	14	28	15	62	52	49	100	92	...	14	31	57
White-breasted Nuthatch	...	4	5	4	...	4	7	1	54	10	9	1	5	22	6	13	5	56	13	18	24	32	2	6	11	23
Red-breasted Nuthatch	4	41	2	1	...	...	1	...	12	2	6	2	...	...	1	12	1	1	...	2	...	15	...	...	...	2
Brown-headed Nuthatch	171	109	34	24	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brown Creeper	50	10	20	17	8	11	12	10	41	10	5	7	3	26	4	12	4	6	1	1	4	12	...	...	...	...
House Wren	24	51	7	6	...	...	1	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1*
Winter Wren	27	31	18	21	2	6	14	3	15	9	6	3	...	34	3	2	...	3	2	...	1	15	...	...	1	3
Carolina Wren	111	272	78	149	17	81	84	90	159	45	19	12	8	117	4	12	5	9	23	18	16	76	...	10	4	21
Long-billed Marsh Wren	16	36	1	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Short-billed Marsh Wren	4	15	1	15	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mockingbird	85	176	112	98	81	91	106	70	163	124	74	39	26	135	47	8	64	38	64	26	100	74	...	19	21	12
Catbird	32	29	4	39	1	21	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Brown Thrasher	18	8	21	25	7	9	5	4	1	...	...	2	...	3	...	...	...	...	4	1	3	1	...	1	3	5
Robin	265	226	16	71	...	83	21	38	130	39	69	141	...	7	14	21	...	2	20	2	2	31	8	18	2	56
Hermit Thrush	19	38	12	7	2	10	9	5	20	1	12	...	...	...	1	...	...	...	...	...	2	...	...	...	...	3
Swainson's Thrush	...	1*	...	...	...	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eastern Bluebird	2	15	3	29	...	40	31	76	15	36	31	44	5	6	1	16	7	5	11	17	15	12	...	1	21	24
Blue-gray Gnatcatcher	...	2*	...	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Golden-crowned Kinglet	170	55	43	53	15	24	103	19	132	80	85	44	1	78	17	26	13	13	6	16	3	85	2	4	1	18
Ruby-crowned Kinglet	70	73	35	83	7	16	73	6	21	9	13	11	5	19	...	...	1	1	1	7	26	2	...	...	...	...
Water Pipit	17	691	...	346	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cedar Waxwing	66	49	95	102	205	58	215	150	87	432	79	190	...	122	6	...	...	2	74	1	...	7	...	4	...	...
Loggerhead Shrike	1	4	...	5	1	2	8	4	...	13	14	17	2	4	9	...	3	...	6	1	8	7	...	1	4	1
Starling	1581	5118	3750	2300	2857	852	3809	1700	2260	1670	4340	5267	250	65,000	1807	92	6647	1,000,000	7703	185	10,781	50,252	...	750	4000	448
White-eyed Vireo	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black-and-white Warbler	...	...	1*	...	...	...	...	...	...	...	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...
Orange-crowned Warbler	3	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Black-throated Blue Warbler	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1*	...	...	...	...
Kyrle Warbler	5560	2792	800	3300	822	1368	150	55	65	14	26	7	30	54	6	...	...	...	3	14	...	...	...	...	9	...
Blackpoll Warbler	...	...	3	4	...	2	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pine Warbler	7	20	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palm Warbler	7	168	12	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yellowthroat	9	8	3	17	1	2	1*	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yellow-breasted Chat	...	2	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
House Sparrow	339	708	63	365	303	65	161	70	269	99	53	89	57	139	537	...	245	430	108	15	213	341	...	85	34	144
Eastern Meadowlark	700	282	173	290	156	280	346	166	87	302	134	12	237	79	...	...	89	83	32	38	80	185	...	80	3	87
Red-winged Blackbird	2391	1018	800	3750	300	2007	455	1650	797	28	2045	...	1	4000	...	...	...	4000	...	...	40	1001	...	...	3	1

	1. Chicoteague	2. Cape Charles	3. Little Creek	4. Back Bay	5. Newport News	6. Hathwa	7. Hopewell	8. Brooke	9. Port Ewell	10. Charlottesville	11. Warren	12. Marlinton Heights	13. Sweet Briar	14. Lynchburg	15. Rockingham Co.	16. Big Flat	17. Augusta Co.	18. Waynesboro	19. Lexington	20. Finks of Otter	21. Roanoke	22. Blacksburg	23. Mt. Rogers-Whitetop	24. Glade Spring	25. Biscuitsville	26. Wism Co.	
Date	12/26	12/27	12/31	12/29	12/18	1/2	12/18	12/20	12/19	1/2	12/19	12/18	12/29	12/31	12/18	12/26	12/22	12/27	12/21	12/20	12/18	12/28	12/28	12/26	12/18		
Baltimore Oriole	...	1*	2*	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Rusty Blackbird	13	32	15	7	...	...	13	25	45	...	88	...	...	...	...	...	1	600	...	...	...	253	...	...	...	...	
Brewer's Blackbird	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Boat-tailed Grackle	2327	2496*	4	14	3	42	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Common Grackle	535	167	1200	81	1*	35	...	40,600	7331	1	2020	7	...	25,000	...	...	18	12,000	...	...	2073	14,552	...	...	1500	32	
Brown-headed Cowbird	53	27	262	262	53	10	142	100	167	...	5	...	...	6000	...	...	3	2400	...	...	20	566	40,176	...	...	...	...
Cardinal	392	450	182	151	95	281	400	270	397	239	224	128	50	340	71	25	80	65	111	45	195	232	...	26	34	85	
Dickcissel	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Evening Grosbeak	235	548	14	30	...	16	60	85	33	261	8	2	6	59	2	42	29	55	8	4	...	128	...	11	8		
Purple Finch	29	31	94	92	1	19	56	12	72	164	135	15	5	399	13	8	10	10	101	16	56	35	...	22	...	23	
House Finch	...	7	4*	...	...	...	2*	...	16	10	...	...	6	15	...	...	5	1	...	...	...	...	...	...	...	...	
Fine Glean	204	361	56	102	3	17	3	3	24	1	...	...	...	...	...	2	...	23	15	...	...	15	...	5	...	...	
American Goldfinch	404	991	198	232	58	155	178	150	508	161	98	76	6	195	40	4	61	79	55	13	35	331	...	5	87	14	
Red Crossbill	...	21*	...	...	...	...	...	...	2*	...	...	...	...	...	...	3	...	1	...	...	...	...	...	...	...	...	
White-winged Crossbill	...	2*	...	...	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Rufous-sided Towhee	205	171	142	86	29	104	110	33	80	16	36	10	5	106	...	...	...	...	16	4	12	34	...	61	6	30	
Ipswich Sparrow	...	3	4	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Savannah Sparrow	240	320	169	318	25	9	32	1	1	1	...	...	...	2	...	...	...	...	...	...	2	1*	...	...	...	2	
Grasshopper Sparrow	...	...	...	...	...	...	...	...	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Sharp-tailed Sparrow	11	72	9	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Seaside Sparrow	15	36	3	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Vesper Sparrow	2	27	2	...	...	...	...	...	1	...	...	...	...	2*	...	...	...	...	...	...	5*	...	...	...	...	...	
Oregon Junco	...	...	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Slate-colored Junco	206	43	523	49	162	218	748	400	1002	780	360	336	85	582	98	66	284	59	172	245	242	288	11	53	81	19	
Tree Sparrow	...	6	...	...	...	...	...	18	14	4	11	...	...	7*	...	...	7	1	...	...	...	...	...	...	...	...	
Chipping Sparrow	7	59	20	...	5	...	2	...	16	...	...	...	...	12*	15*	...	...	...	...	...	12*	...	...	...	...	1*	
Field Sparrow	421	112	117	159	41	27	111	140	130	272	349	102	3	174	18	...	19	13	16	53	50	184	...	55	37	117	
White-crowned Sparrow	1	4	...	...	...	...	25	16	2	15	42	...	...	44	11	23	...	50	111	14	35	17	126	...	44	27	...
White-throated Sparrow	1171	1904	615	640	233	432	1214	560	806	312	228	216	69	759	60	41	48	46	177	135	231	302	...	52	7	56	
Fox Sparrow	24	38	12	13	22	6	14	4	8	2	...	...	...	1	19	...	...	...	...	2	1	1	...	...	3	2	
Lincoln's Sparrow	...	2*	...	3*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Swamp Sparrow	499	428	183	298	14	53	29	16	33	5	6	9	...	8	...	...	...	...	...	4	1	...	...	...	2	5	
Song Sparrow	765	973	211	416	173	172	240	150	310	196	247	97	14	178	35	3	15	34	107	52	72	232	...	46	23	129	
Lepland Longspur	...	1*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Snow Bunting	24	...	...	...	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total Species	158	180	140	143	105	101	96	92	97	69	77	54	44	72	62	41	54	62	53	48	74	73	10	45	49	57	
Total Individuals	66,613	81,633	40,349	174,018	11,741	11,360	26,118	46,733	24,274	7085	13,391	7781	1100	105,480	4157	684	11,343	1,022,117	9671	1317	16,387	110,338	42	1808	6909	2256	
Total Party-hours	144	135	70	110	54	73	63	82	132	66	51	29	16	91	27	21	25	50	30	26	62	93	16	16	17	52	
Number of Observers	36	45	20	26	20	24	15	14	37	12	9	13	9	37	10	4	14	20	11	10	31	26	9	3	1	12	

record for this count, and the two Eastern Shore counts also reported record numbers of House Wrens, 24 at Chincoteague and 51 at Cape Charles, indicating a continuation of the wintering increase of this species along the coast. West of the Coastal Plain, the only House Wren found was one at Wise. Brown Thrashers were found on seven counts west of the Blue Ridge, a remarkable increase over recent years, and Swainson's Thrushes were reported at both Cape Charles and Fort Belvoir.

Although the Eastern Bluebird may still be in trouble in Virginia as a breeding bird, its recovery as a wintering bird has been remarkable. Following the disastrous population decline of the winter of 1960-61, when the Christmas count total was only 69, a low was reached the following year of 51, or 8 birds per 100 party-hours (*Raven*, 34: 12, 1963). Although the numbers have fluctuated greatly in the ensuing years, the trend has been upward, and this year 459 bluebirds were recorded on 24 of the 26 counts, or 30 birds per 100 party-hours. Although this is obviously a great improvement, it still does not approach the 844 birds recorded in 1957 on only 18 out of 19 counts (133 per 100 party-hours).

Two Blue-gray Gnatcatchers found at Cape Charles and one at Hopewell seem to be the fourth and fifth Virginia Christmas count records. Unusual vireo and warbler records were many this year. A White-eyed Vireo at Cape Charles and a Blackpoll Warbler at Warren were both new to the cumulative list. Black-and-white Warblers at Little Creek and Lynchburg appear to be the sixth and seventh state count records, and a Black-throated Blue Warbler at Roanoke was only the second count record, the first being in 1970 at Cape Charles. Pine Warblers, however, were recorded on only two counts west of the immediate coast, Mathews and Brooke. Big blackbird (and Starling) concentrations were noted on two counts west of the Blue Ridge, Waynesboro and Blacksburg. In previous years these have generally been confined to the Coastal Plain and Piedmont.

This was another flight year for northern finches. The Evening Grosbeak total of 1752 birds on 23 counts was the highest ever for Virginia, whereas the 832 Pine Siskins recorded on 15 counts, although well above the 1970 total of 77, was still below the all-time peaks recorded in 1968 and 1969. Red Crossbills were recorded on four counts this year, and White-winged Crossbills were seen at Cape Charles and Brooke. The House Finch, first recorded on a Virginia Christmas count in 1966, continued its increase as a wintering bird unabated. Found on three counts in 1968 and two in 1969, it increased to 62 on seven counts in 1970 and 66 on nine counts this year.

In any mild winter the sparrow population is always of interest. Savannah Sparrows on three western counts and a remarkable 5 Vesper Sparrows at Roanoke were evidences of the mild weather inland. Even more outstanding, however, were the inland reports of Chipping Sparrows, with 12 at Lynchburg, 15 at Rockingham, 12 at Roanoke, and 1 at Wise. Although substantiating details were not given for all of these, the trend is evident. Other unusual records included a Grasshopper Sparrow at Warren and Oregon Juncos at both Back Bay and Wise. These last were the second and third Christmas count records for Virginia.

1. CHINCOTEAGUE NATIONAL WILDLIFE REFUGE (all points within a 15-mile diameter, center 2 miles north of center of Chincoteague as in previous 17 years; open farmland 13%, insular pine woodland 9%, mainland woodland 19%, scrub pine and myrtle



thickets 6%, fresh-water marshes and impoundments 7%, salt marshes 25%, sheltered bay 15%, dunes 2%, sand flats and beaches 4%).—Dec. 28; 5:30 a.m. to 6 p.m. Partly cloudy; temp. 49° to 66°; wind S to SW, 4-15 m.p.h.; ground bare, water open. Thirty-six observers in 15 parties. Total party-hours, 144 (127 on foot, 13 by car, 4 by boat); total party-miles, 337 (91 on foot, 222 by car, 24 by boat). Observers: David Abbott, Jackson Abbott, Robert Ake, Henry Armistead, Ruth Beck, Micou Browne, Mitchell Byrd, Charles Cremeans, William Del Grande, Paul DuMont, Philip DuMont, John Farrand, Jr., Robert Fisher, Malcolm Garner, Harriet Gilbert, Robert Kennedy, Elwood Martin, Will McDowell, Edwin and Asenath McKnight, Dwight Peake, Richard Peake, Lewis Pyle, Peter Pyle, Robert Pyle, Chandler Robbins, Grace Russell, William Russell, F. R. Scott (compiler), Jarad Sparks, Paul Sykes, Jr., John Terborgh, Charles Vaughn, Vee Weggel, Claudia Wilds, Bill Williams. The White Pelican, which had been present in the area since August 30, was seen by Browne, the Peakes, and Sykes, and the King Eider was found by three parties including the McKnights, the Pyles, and Sykes. The high count of Marbled Godwits was reported by the DuMonts and Fisher, and the Common Tern was also carefully identified by Fisher. The murre, originally thought to be a Common Murre, was observed by Jackson Abbott, who later decided the specific identification was a bit uncertain. Farrand flushed the Chuck-will's-widow and observed all the characteristic field marks. Detailed written descriptions were submitted for all unusual observations.

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 to include Ship Shoal, Myrtle, Fisherman, Mockhorn, and Smith Islands, Kiptopeke, Oyster, and Capeville to 3 miles west into Chesapeake Bay; open bay 25%, salt marsh 20%, sheltered bay and mudflats 17%, open farmland 15%, open ocean and beach 10%, pine and mixed woodland 10%, towns 2%, fresh water 1%).—Dec. 27; 4 a.m. to 6 p.m. Clear; temp. 53° to 72°; wind SW, 0-5 m.p.h.; ground bare, water open. Forty-five observers in 8 parties. Total party-hours, 135 (115 on foot, 16 by car, 4 by boat); total party-miles, 406 (95 on foot, 276 by car, 35 by boat). Observers: David and Jackson Abbott, Robert Ake, Henry Armistead (cocompiler), Ruth Beck, Hugh and Elizabeth Bell, Micou Browne, Mitchell Byrd, Charles Cremeans, William Del Grande, Paul and Philip DuMont, John Farrand, Jr., David and Caroline Green, Charles Hacker, Jonathan Higman, Robert Kennedy, Ernest and Norma Klussman, Betty Lancaster, William McDowell, Dorothy Mitchell, Robert Pacific, Dwight and Richard Peake, Lewis, Peter, and Robert Pyle, Grace Russell, William Russell (cocompiler), F. R. Scott, Brian Sharp, Jarad Sparks, Ruth Strosnider, C. Byron Swift, III, Paul Sykes, Jr., Ray and Marion Teele, John Terborgh, Charles Vaughn, Claudia Wilds, Bill Williams, Townley Wolfe, III. The immature Great Cormorant was observed in direct comparison with a Double-crested Cormorant by William Russell and the Peakes, and the Green Heron was reported by Richard Peake. The Cattle Egrets were found by Byrd and party and the eider by Wilds. The pheasants were reported as Ring-necked Pheasants but were changed by the editor to Japanese Green Pheasants since this is the resident species in the area. The Black Rail was flushed by Klussman and seen in flight by her, Strosnider, and Mr. and Mrs. Teele, and Swift saw the Spotted Sandpiper at a fresh-water pond both at rest and in its characteristic flight. The Royal Terns were reported by two parties led by Byrd and Terborgh. The Barred Owl, unusual here, was heard calling by Paul DuMont. The Long-eared Owl and 2 of the Saw-whets were heard by Richard Peake, while Browne heard the third Saw-whet. One of the Western Kingbirds was seen by Del Grande and McDowell and the other by the same observers plus the Abbotts and Cremeans. The Swainson's Thrush, Blue-gray Gnatcatchers, and White-eyed Vireo were all found by Paul DuMont. The Baltimore Oriole was observed by Mrs. Bell, Lancaster, and Vaughn, and Richard Peake saw the Brewer's Blackbird with several Rusty Blackbirds. Both crossbills were reported by the Pyles, although only Peter Pyle positively identified the White-wings. Richard Peake found both Lincoln's Sparrows, and the Lapland Longspur was seen by Dwight 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, to include Cape Henry, Lynnhaven Inlet, Little Creek, eastern portion of Norfolk City, Stumpy Lake; farmland 8%, pine woodland 10%, deciduous woodland 16%, salt marsh, beach, rivers, bay, and ocean 21%, suburbs 45%).—Dec. 31; 5:30 a.m. to 5 p.m. Partly cloudy; temp. 44° to 62°; wind SW to N, 14-20 m.p.h.; ground bare, water open. Twenty observers in 7 parties. Total party-hours, 70 (58 on foot, 12 by car); total party-miles, 323 (24 on foot, 299 by car). Observers: Robert Ake, J. E. Ames, Robert Anderson, Carvel Blair, Floy Burford, Wavell Fogleman, Anna Grimm, Gisela Grimm, Virginia Hank, David Hughes, Betty Lancaster, Dorothy Mitchell, Sydney Mitchell, Emily Moore, Richard Peake, Jr., Frank Richardson, W. F. Rountrey, Paul Sykes, Jr. (compiler), Dorothy Tripican, Robert Tripican. The Common Eiders, all immature males, were seen by Robert Anderson, and Sykes and Robert Tripican studied the Iceland Gull at leisure several times during the day in flight and at rest in close comparison with Herring and Ring-billed Gulls. The adult Black-headed Gull was observed by Sykes in close comparison with Bonaparte's Gulls. Two adult and 1 immature Little Gull were also with Bonaparte's Gulls and were studied carefully by Ake, Peake, and Fogleman. Peake reported the Black-and-white Warbler, and the Baltimore Orioles were observed at feeding stations by two different parties. They had been present in the area prior to the count day. The House Finches were noted at close range by Ames, Richardson, and Rountrey.

4. BACK BAY NATIONAL WILDLIFE REFUGE (all points within a 15-mile diameter, center 1.5 miles east of Back Bay, to include all of refuge and much of mainland of Virginia Beach; farmland 20%, pine woodland 10%, deciduous woodland 20%, beach and dunes 5%, marshes and brackish bay 25%, ocean 20%).—Dec. 29; 4 a.m. to 5 p.m. Partly cloudy; temp. 43° to 55°; wind N to S, 5-14 m.p.h.; ground bare, water open. Twenty-six observers in 11 parties. Total party-hours, 110 (82 on foot, 24 by car, 4 by boat); total party-miles, 386 (59 on foot, 313 by car, 14 by boat). Observers: Robert Ake, Robert Anderson, Micou Browne, Floy Burford, Jay Carter, Connie Darden, Douglas Davis, Dwight Davis, Wavell Fogleman, Gisela Grimm, Virginia Hank, David Hughes, Helen Irving, R. K. Irving, Annette Kinzel, Emily Moore, Harold Olson, Robert Pacific, Dwight Peake, Richard Peake, Frank Richardson, W. F. Rountrey, Genie Scott, Tim Sniffen, Paul Sykes, Jr. (compiler), Romie Waterfield. Seen in count period but not on count day: *European Widgeon*. The Cattle Egrets were seen feeding in a field by Burford, Darden, and Scott. The male European Widgeon, seen December 27 (but not on count day), was in the southern part of the count circle just over the North Carolina line (Richardson and Rountrey). The Osprey was observed fishing by Grimm, Hank, the Irvings, and Moore, and the pheasant was heard calling by Browne and Sykes. Carter saw the unidentified jaeger offshore in good light, and the 3 adult and 2 immature Little Gulls were found by Sykes mixed in with numerous Bonaparte's Gulls. The immature Black-legged Kittiwakes were studied at about 100 yards by Browne and Carter, and the male Brewer's Blackbird was found by the Peakes. Ake and Anderson found the male Dickcissel with a flock of House Sparrow, and the Oregon Junco, a bird in very good plumage, was seen by Richard Peake. The Lincoln's Sparrows were observed at close range by two different parties. Detailed written descriptions were submitted for all unusual observations.

5. NEWPORT NEWS (all points within a 15-mile diameter, bounded by Chesapeake Bay, Hampton Roads, James River, Grafton; woodland 30%, fields 10%, fresh-water ponds 10%, waterfront 20%, residential areas 30%).—Dec. 18; 7 a.m. to 3:30 p.m. Clear; temp. 30° to 45°; wind NW, 15-25 m.p.h.; ground bare, water open. Twenty observers in 7 parties. Total party-hours, 54 (40 on foot, 14 by car); total party-miles, 268 (30 on foot, 238 by car). Observers: Ruth Beck, Hugh and Elizabeth Bell, L. Bjostad, Mitchell Byrd, Charles Hacker, Stalma Hacker, Gustav Hall, Jose Hernandez, B. Holt, Betty Lancaster, Dorothy and Sydney Mitchell, Gary Seek,

Dorothy Silsby, H. Silsby, W. P. Smith (compiler), Susan Sturm, Jerry Via, Bill Williams. The Gannets were reported by Hall and Holt, and the Whistling Swans, which had been in the area for a month, were reported by Sydney Mitchell. Hall and Holt found the Lesser Yellowlegs, and the Common Tern was seen by Byrd. The single Common Grackle was almost unbelievable since the normal count for this area is in the hundreds or thousands.

6. MATHEWS (all points within a 15-mile diameter, center 0.5 mile E of Beaverlett P. O. to include Gwynn's Island, New Point Comfort, portions of Chesapeake and Mobjack Bays; open farmland 20%, bays and rivers 30%, beaches 5%, salt marshes 15%, pine woods 20%, mixed woods 10%).—Jan. 2; 6 a.m. to 5:30 p.m. Cloudy, scattered showers; temp. 50° to 57°; wind S to SW, 12-32 m.p.h. Twenty-four observers in 8 parties. Total party-hours, 73 (41 on foot, 32 by car); total party-miles, 306 (43 on foot, 263 by car). Observers: Cleo Allen, Ruth Beck, John Bishop, Mitchell Byrd, Pat Carey, Peggy Gill, Brent Heath, Clare Jones, Virginia Maguigan, Grace Nauman, Mary Pulley, Elinore Respass, Betty Roszell, David Roszell (compiler), Jonathan Roszell, Frederic Scott, Bill Slate, Bryant Strother, Florence Strother, Susan Sturm, Mary Tompkins, Helen Walker, Jim Watson, Henrietta Weidenfeld. The Eastern Kingbird was found by Mrs. Jones who noted all the obvious field marks.

7. HOPEWELL (all points within a 15-mile diameter, center in Curles Neck as in last 17 years, to include Presquile National Wildlife Refuge, Fort Harrison, Curles Neck, Harrison Lake, Hopewell, Dutch Gap; open farmland 30%, brushy fields 5%, marshes and river shore 15%, deciduous wooded swamp 5%, woodland 45%).—Dec. 18; 6 a.m. to 6 p.m. Clear; temp. 26° to 44°; wind NW, 8-35 m.p.h.; ground clear, water open. Fifteen observers in 6 parties. Total party-hours, 63 (51 on foot, 10 by car, 2 by boat); total party-miles, 308 (34 on foot, 262 by car, 12 by boat). Observers: Robert Ake, Cleo Allen, John Bishop, Jane Carpenter, Marilyn Csakey, Paul Daly, Wavell Fogleman, G. E. Inskeep, David and Betty Roszell, F. R. Scott (compiler), David Sonneborn, Bryant Strother, Mary Tompkins, Robert Watson. Seen in area count period but not on count day: Horned Grebe. The Common Gallinules were seen by David Roszell with a few American Coots, and the Least Sandpipers were recorded by Bishop and Scott in an area they had been in all fall. Ake and Fogleman recorded the Laughing Gulls, and the Barn Owls were found by two parties in different parts of the count area. The Blue-gray Gnatcatcher was reported by David Roszell, and Scott recorded the Yellowthroat. The House Finches were found by two parties, 1 by Ake and Fogleman and the other by Scott.

8. BROOKE (all points within a 15-mile diameter, center on road 3 miles ESE of Brooke, to include Potomac River from Widewater to Maryland Point Lighthouse, and Virginia upland nearly to Fredericksburg; tidal water 17%, marsh 10%, deciduous wooded swamp 6%, fields 14%, hedgerows 7%, mixed forest edge 26%, deciduous woods 13%, pine woods 6%, slash 1%).—Dec. 20; 5:45 a.m. to 5:30 p.m. Rain until 9 a.m., clearing slowly in p.m.; temp. 42° to 58°; wind W, 0-15 m.p.h.; ground bare, water open. Fourteen observers in 10 parties. Total party-hours, 82 (65 on foot, 17 by car); total party-miles, 137 (41 on foot, 96 by car). Observers: 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 Blue-winged Teal were seen by Smith, the House Wren by Eric and Wones, the Pine Warbler by Blake and Nolan, and the White-winged Crossbill by Baker and Wiesnet. Written descriptions were received of all the unusual observations except the crossbill.

9. FORT BELVOIR (all points within a 15-mile diameter, center on Pohick Church; tidal water 30%, deciduous woods 20%, pine woods 5%, pastures and fields 8%, brush land (cut-over timber) 8%, town suburbs 28%, marsh 1%).—Dec. 19; 6 a.m. to 6 p.m. Clear; temp. 26° to 42°; wind W, 0-10 m.p.h.; ground bare, water un-

frozen. Thirty-seven observers in 18 parties. Total party-hours, 132 (103 on foot, 26.5 by car, 2.5 by boat); total party-miles, 370 (90 on foot, 272 by car, 8 by boat). Observers: David Abbott, Jackson Abbott (compiler), Eleanor Beal, Ed J. Bierly, Ed S. Buckler, Robert Caswell, Paris Coleman, Charles Cremeans, W. D. and W. L. Del Grande, Paul and Philip DuMont, Larry Dunkeson, David Gamache, Harriet Gilbert, Allen Hale, R. W. Harvey, Morgan Jones, Kathleen Klimkiewicz, Ernest and Norma Klussman, George LaKata, Joan Lusby, Will McDowell, Jean Morse, Marion and Harvey Mudd, W. Oberman, Ed Poole, Robert Pyle, Ed Rivinus, George Sigel, Tom Stock, Vee Weggel, Claudia Wilds, Donald Woodard, Paul Woodard. Seen in area count period but not on count day: Ruffed Grouse, Turkey, Horned Lark, White-winged Crossbill. The Lesser Yellowlegs and Swainson's Thrush were reported by Klimkiewicz and the Red Crossbills by Buckler.

10. CHARLOTTESVILLE (all points within a 15-mile diameter, center near Ivy as in previous years; riverbottom 30%, farmland 25%, lakes and ponds 20%, deciduous woods 20%, pine woods 5%).—Jan. 2; 5:30 a.m. to 5:30 p.m. Light rain; temp. 33° to 43°; no wind; ground bare, water open. Twelve observers in 9 parties. Total party-hours, 66 (50 on foot, 14 by car, 2 by canoe); total party-miles, 234 (63 on foot, 168 by car, 3 by canoe). Observers: Robert Barbee, Bruce and Pring Davenport, Paul Dulaney, Tom Estes, Boo Johnson, Kenneth Lawless, Robert Merkel, Katherine Michie, Eileen Stephens, Charles Stevens (compiler), Tom Wieboldt.

11. WARREN (all points within a 15-mile diameter, center near Keene as in previous years; open farmland 40%, riverbottom 25%, deciduous woods 25%, pine woods 5%, ponds 5%).—Dec. 19; 5:45 a.m. to 5:45 p.m. Partly cloudy; temp. 17° to 37°; wind SE, 0-10 m.p.h.; ground bare, water open. Nine observers in 6 parties. Total party-hours, 51 (42 on foot, 9 by car); total party-miles, 179 (53 on foot, 126 by car). Observers: Bruce Davenport, Kenneth Lawless, Robert Merkel, Charles Stevens (compiler), Fred and Lina Whiteside, Tom Wieboldt. The Blackpoll Warbler and Grasshopper Sparrow were both reported by Lina Whiteside.

12. DARLINGTON HEIGHTS (all points within a 15-mile diameter, center Darlington Heights P. O.; open fields 25%, stream edge 15%, mixed woodland 10%, hedgerows 10%, woodland edge 20%, pine woodland 15%, lakes 5%).—Dec. 18; 7:30 a.m. to 5 p.m. Clear; temp. 22° to 34°; wind NW, 10-20 m.p.h.; ground bare, water open. Thirteen observers in 4 parties. Total party-hours, 29 (21 on foot, 6 by car, 2 at feeder); total party-miles, 118 (18 on foot, 100 by car). Observers: John Cacciapaglia, Vera Copple (compiler). Bill Dickenson, Edith and Hall Driskill, Keith Fielder, Jeff Halvorson, Sam Jordan, Paul McQuarry, Myriam Moore, Wyatt Murphy, Mattie Scruggs, Margaret Watson. No details were given for the Blue-winged Teal.

13. SWEET BRIAR (all points within a 3-mile diameter, center Sweet Briar College; fields and pastures 20%, mixed woods 30%, creek bottoms 30%, around buildings and barns 15%, lakes 5%).—Dec. 29; 7:30 a.m. to 4:30 p.m. Overcast, clearing in p.m.; temp. 38° to 58°; wind, 2-5 m.p.h.; ground bare, water open. Nine observers in 2 parties. Total party-hours, 16 (15.5 on foot, 0.5 by car); total party-miles, 12 (11 on foot, 1 by car). Observers: Carolyn Bates, Vicky Bates, Mary Blackwell, Jeanette Boone, Mary Butterworth, Ernest Edwards, Billy Flint, Polly Flint, Kay Macdonald, Gertrude Prior (compiler), Dorothy Studer.

14. LYNCHBURG (all points within a 15-mile diameter, center Lynchburg College, to include James River, College Lake, Timber Lake, Pine Hill Lake; Blackwater, Ivy, Tomahawk, and Judith Creeks; Wooldridge, Capron, and Burnbrae Farms; Blue Ridge Farms, Rivermont, Riverside Park, River Road; mixed woods 22%, pine woods 3%, wooded residential areas 20%, creeks and river bottoms 32%, fields and pastures 17%, lakes and ponds 6%).—Dec. 31; 7 a.m. to 5:30 p.m. Cloudy; temp. 36° to 47°; wind NW, 8-12 m.p.h.; ground dry, streams open. Thirty-seven observers in 10 parties. Total party-hours, 91 (80 on foot, 11 by car); total party-miles, 245

(59 on foot, 186 by car). Observers: Keith Almond, Frances Applegate, Jeanette Boone, John Cacciapaglia, James Carter, Vera Copple, Audree Dodd, Edith Driskill, Keith Fielder, Beth Freer, David Freer, R. S. Freer, Jeff Halvorson, Roger Hill, Cam Jordan, Robin Jordan, Wilda Menagh, Paul McQuarry, Gene Moore, Myriam Moore (compiler), Cary Murphy, Phyllis Murphy, Wyatt Murphy, Lars Nelson, Betty Jean Padley, Gertrude Prior, Becky Richardson, Joan Ricketts, Rosalie Rosser, Hans Seyffert, J. Steven Thornhill, M. B. Tillotson, R. M. Tillotson, Lorene Thomas, Mary Walker, Margaret Watson, Grace Wiltshire. Seen in area count period but not on count day: Ruffed Grouse, Red-breasted Nuthatch, Pine Siskin. A Broad-winged Hawk was removed from the count because of a complete lack of substantiating details. The Black-and-white Warbler was carefully studied by Hill, Nelson, and Phyllis Murphy, and the Vesper Sparrows were seen by the entire party led by Wyatt Murphy. No details were submitted for the Chipping Sparrows.

15. ROCKINGHAM COUNTY (all points within a 15-mile diameter, center at Otterbine, including Silver Lake in Dayton; lawn and shade trees in town 5%, cottonwood-sycamore river bottoms 5%, open farmland and farm woodlots 55% mixed Apalachian conifers and hardwoods in mountains 35%; elevation, 1160 to 3200 feet).—Dec. 18; 7 a.m. to 5 p.m. Clear; temp. 20° to 27°; wind N, 10-15 m.p.h.; ground bare, some waters frozen. Ten observers in 3 parties. Total party-hours, 27 (9 on foot, 18 by car); total party-miles, 259 (23 on foot, 236 by car). Observers: Robert Burns, Max Carpenter (compiler), Lawrence Carpenter, Robert Eggleston, Hollen Helbert, Mozelle Henkel, Harry Jopson, YuLee Lerner, Lee Norford, Richard Smith. The Chipping Sparrows were reported by Norford and Smith.

16. BIG FLAT MOUNTAIN (all points within a 15-mile diameter, center on Pasture Fence Mountain as in previous years; hardwoods 70%, shrubby fields 10%, pine-oak woods 8%, hemlock groves 5%, open fields 5%, reservoir 2%).—Dec. 26; 7 a.m. to 6 p.m. Partly cloudy; temp. 47° to 66°; wind NW, 5-20 m.p.h.; ground bare, water open. Four 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: Robert Merkel, Eileen Stephens, Charles Stevens (compiler), Tom Wieboldt.

17. AUGUSTA COUNTY (all points within a 15-mile diameter, center Verona, to include Brand's Flat, Fort Defiance, Frank's Mill, Mt. Sidney, New Hope, Quick's Mill, Spring Hill, Staunton; farmyards, orchards, and gardens 5%, fields and pastures 70%, swamps and ponds 5%, towns 5%, woods 15%).—Dec. 22; 8 a.m. to 5 p.m. Scattered clouds; temp. 28° to 35°; wind SE, 0-10 m.p.h.; ground bare, waters open. Fourteen observers in 3 parties. Total party-hours, 25 (9 on foot, 16 by car); total party-miles, 164 (17 on foot, 147 by car). Observers: John Cacciapaglia, Alex Green, James Gum, Betty Harman, Stanley Heatwole, Mozelle Henkel, Josephine King, Si and YuLee Lerner, John F. Mehner (compiler), Isabel Obenschain, Ruth S. Snyder, James Sprunt, Rocky Wagner.

18. WAYNESBORO (all points within a 15-mile diameter, center Sherando, to include Waynesboro, Stuarts Draft, South River, Blue Ridge Parkway from Rockfish Gap to Love, Big Levels Game Refuge, Lake Sherando, portions of western Nelson County; residential areas 10%, fields 45%, ponds and streams 15%, mixed woods 30%).—Dec. 27; 6 a.m. to 5:15 p.m. Clear to partly cloudy; temp. 50° to 70°; wind SW, 0-15 m.p.h.; ground bare, water open. Twenty observers in 7 parties. Total party-hours, 50 (31 on foot, 19 by car); total party-miles, 260 (42 on foot, 218 by car). Observers: Mr. and Mrs. J. R. Bracken, John Cacciapaglia, Dennis Carter, Alex Green, Carter Green, James Gum, Mozelle Henkel, Vivian Jackson, YuLee Lerner, Sally Marcotte, Jean Mehler, Arthur Mizzi, Isabel Obenschain, Mary Shiflet, Lynn Smith, Ruth Snyder (compiler), Sam Snyder, Charles Stevens, Rocky Wagner. The Rough-legged Hawk was carefully identified by Cacciapaglia and his party. Seen in area count period but not on count day: Great Horned Owl, Dickcissel, Rufous-sided Towhee.

19. LEXINGTON (all points within a 15-mile diameter, center Washington and Lee University as in previous 41 years, to include Maury River, South River, Brushy Hills, Kerr's Creek, Big Spring Pond; deciduous woods 15%, evergreen woods 15%, riverbottom and ponds 20%, fields and pastures 20%, brush 25%, town 5%).—Dec. 21; 7 a.m. to 5 p.m. Clear; temp. 41° to 64°; Wind W, 0-5 m.p.h. Eleven observers in 4 parties. Total party-hours, 30 (22 on foot, 8 by car); total party-miles, 105 (27 on foot, 78 by car). Observers: Kenneth and Judy Bradford, Mrs. Malcomb Campbell, Ben Clark, Royster Lyle, Mrs. A. W. Morgan, J. J. Murray, J. J. Murray, Jr., Robert O. Paxton (compiler), Mrs. Edward F. Turner, Joshua Womeldorf. The Green Heron, a first for this count, was seen by Paxton.

20. PEAKS OF OTTER (all points within a 15-mile diameter, center Peaks of Otter Visitor Center, to include Blue Ridge Parkway, Goose Creek, Harkening Hill, Highway 43, Sharp Top; mixed deciduous woods 80%, fields 12%, conifers 6% towns 1%, streams and ponds 1%; elevation 860 to 3950 feet).—Dec. 20; 7:30 a.m. to 5 p.m. Cloudy, rain in a.m.; temp. 33° to 51°; wind SW, 2-10 m.p.h.; ground bare, water open. Ten observers in 4 parties. Total party-hours, 26 (20 on foot, 6 by car); total party-miles, 121 (17 on foot, 104 by car). Observers: Garst Bishop, Robert Bruce, Dennis Carter (compiler), Almon English, Keith Fielder, Ruskin Freer, Jeffrey Halvorson, Paul McQuarry, Ernest and Hazel Moore. The American Woodcock was flushed from the east side of the Blue Ridge by Fielder and Halvorson and later by McQuarry.

21. ROANOKE (all points within a 15-mile diameter, center Wasena Bridge; mixed deciduous and coniferous woods 56%, open fields 30%, suburbs 6%, streams and ponds 8%).—Dec. 18; 5 a.m. to 6 p.m. Clear; temp. 17° to 45°; wind NW, 15-40 m.p.h.; ground bare. Thirty-one observers in 7 parties. Total party-hours, 62 (27 on foot, 35 by car); total party-miles, 315 (30 on foot, 285 by car). Observers: Charles Ames, Margaret Brown, Robert Bruce, Dennis Carter, Cole Church, Doris Clark, Foy Clark, Steve Croy, Gary Davis, Nora Davis, Mike Dowdy, Samuel Ellington, Dora Ellington, Joe Hankins, Norma Harper, Raymond Harper, Rushia Harris, Perry Kendig, Aaron Lyle, Phillip Lyle, Skippy Lyle, Curtis Miller, Mrs. Curtis Miller, Ernest Moore, Hazel Moore, Sally Nelson, Bill Opengari, Jane Opengari, John Pancake, Mike Purdy, Mary Ramsey, Julian Tinsley (compiler), John Walke. Seen in area count period but not on count day: Redhead, Evening Grosbeak. The Whistling Swans and remarkable flock of Blue-winged Teal were seen by the Lyles, Pancake, and Tinsley, who also found the adult Bald Eagle. The Broad-winged Hawk was seen by Dowdy, Jane Opengari, and Walke, who were able to see the tail bands at close range, and the Pigeon Hawk, with a bluish back, was found by Croy, the Moores, and Purdy. The Black-throated Blue Warbler, a male in good plumage, was studied by the Opengaris, Dowdy, and Walke, while the Vesper Sparrows were seen by Tinsley, Kendig, Davis, Pancake, and the Lyles. There was no information available on the Spotted Sandpiper or the Chipping Sparrows.

22. BLACKSBURG (all points within a 15-mile diameter, center near Linkous Store; pasture and plowed land 15%, towns and suburbs 10%, oak woodlots 3%, mixed pine and oak woods 50%, river and creek bottoms 22%).—Dec. 28; 6:30 a.m. to 5:15 p.m. Partly cloudy with showers; temp. 50° to 62°; Wind W, gusty, 2-40 m.p.h.; ground bare, water open. Twenty-six observers in 10 parties. Total party-hours, 93 (68 on foot, 25 by car); total party-miles, 406 (61 on foot, 345 by car). Observers: Bill Akers, Chris Cochran, Don Cochran, Hewlette Crawford, Clara Dickinson, Robert and Pat Downing, Maynard Hale, Richard Harlow, Charles and Darelyn Handley, Baldwin Lloyd, Burd McGinnes, John Murray (compiler), Curtis and Martha Roane, Myron Shear, Ronald Shear, Joyce Simpkins, Howard and Myra Shinn, Ellison and Mary Linda Smyth, Connie Stone, David West, Clifton Wills. Seen in area count period but not on count day: Black Duck, Horned Lark. The Savannah Sparrow was found by Curtis Roane.



23. MT. ROGERS-WHITETOP (all points within a 15-mile diameter, center at junction of Virginia routes 600 and 603, to include peaks of Mt. Rogers and White-top; from the Saddle to peak of Mt. Rogers along logging road via Elk Garden and to the peak of Whitetop via main road; deciduous woodland 50%, grassy fields 30%, spruce-fir forest 20%; elevation up to 5729 feet).—Dec. 28; 7 a.m. to 3 p.m. Light sleet and rain; temp. 45° to 49°; wind NE to NW, 20-30 m.p.h.; foggy with limited visibility. Nine observers in 2 parties. Total party-hours, 16 (all on foot); total party-miles, 16 (all on foot). Observers: Wallace Coffey, Anthony Decker, Ken Hale, Joseph Jackson, David McPeak, David McPeake, Jr., Brent Rowell (compiler), John Todd, Henry Woodard.

24. GLADE SPRING (all points within a 15-mile diameter, center at junction of routes 150 and 609; open fields and hedgerows 45%, mixed deciduous and pine woods 30%, river bottomland 15%, residential areas 5%, marshes and ponds 5%).—Dec. 28; 7:30 a.m. to 5:30 p.m. Rain in a.m., clearing in p.m.; temp. 45° to 55°; wind SW, 5-15 m.p.h.; ground bare, streams open. Three observers in 2 parties. Total party-hours, 16 (11 on foot, 5 by car); total party-miles, 72 (12 on foot, 50 by car). Observers: Turner Clinard, Paul Dulaney (compiler), Jane White.

25. NICKELSVILLE (all points within a 15-mile diameter, center Nickelsville, to include parts of Clinch River, Moccasin Creek, Clinch Mt.; woods 10%, residential areas 10%, fields and river bottoms 80%).—Dec. 26; 5 a.m. to 9:45 p.m. Mostly cloudy; temp. 40° to 55°; wind SW, 0-8 m.p.h.; fields moist, woods and roads dry. One observer. Total party-hours, 17 (13 on foot, 4 by car); total party-miles, 57 (5 on foot, 52 by car). Observer: Eugene Scott. Seen in area count period but not on count day: Purple Finch. No substantiating details were submitted for the 28 Oregon Juncos; this record was therefore omitted.

26. WISE COUNTY (all points within a 15-mile diameter, center Dorchester, to include High Knob, Norton, Wise; deciduous woodland 60%, coniferous woodland 2%, fields and pastures 15%, orchards 5%, lakes and streams 3%, business and residential areas 15%).—Dec. 18; 4:30 a.m. to 5 p.m. Partly cloudy; temp. 12° to 38°; wind SW, 5-20 m.p.h.; land bare, large bodies of water open. Twelve observers in 6 parties. Total party-hours, 52 (34 on foot, 18 by car); total party-miles, 259 (22 on foot, 237 by car). Observers: Sarah Cromer, Elizabeth Gibson, Gaynelle Malesky, Jean Miller, Mark Mullins, Dwight Peak, Richard Peake (compiler), Mauricio Schrader, Philip Shelton, Addison Stallard, Joseph Straughan, Hazel Thrower. Seen in area count period but not on count day: Ruffed Grouse, Cedar Waxwing. The immature Black-crowned Night Heron was found by Mullins and Dwight Peake. It remained in the area until late January. The Black Duck was seen by Schrader and Shelton, and the American Coot had been present in the area throughout December. Stallard and Richard Peake observed both the Eastern Phoebe and the House Wren, the latter having been present in the area since November. The Oregon Junco had been at the Peake feeding station since mid December and on the count day was identified by Mullins and Dwight Peake. The Chipping Sparrow was found by Stallard and Richard Peake. Excellent written descriptions were received of all the above observations.

115 KENNONDALE LANE, RICHMOND, VIRGINIA 23226

## AN UNUSUAL PELAGIC MIGRATION

JOHN T. LINEHAN

As the wind increased on 6 November 1971 it was apparent that a large movement of gulls and other ocean birds was under way along the shore south of Virginia Beach near Back Bay National Wildlife Refuge, Virginia. Groups of



Laughing Gulls, *Larus atricilla* Linnaeus, 200 to 800 each, could be seen feeding or resting on the water and on the beach, while a continual north-to-south movement of individual gulls went on.

The following day as the wind increased and the temperature declined against an overcast sky, the movement of Laughing Gulls increased. An estimated 72,000 passed southward during the day. The feeding groups occasionally worked in toward shore, and it was while one group was near the surf line that I noticed a jaeger, a light-phase adult Pomarine Jaeger, *Stercorarius pomarinus* (Temminck), with central rectrices well visible when it came within 100 yards three or four times. A careful study of the feeding groups of gulls farther out revealed many sightings of other, unidentified, jaegers either chasing or being chased by gulls. Six jaegers were counted in two separate groups of gulls 300 to 600 yards offshore within a few minutes.

Two Greater Shearwaters, *Puffinus gravis* (O'Reilly), were seen from the beach opposite the Refuge headquarters at about 150 yards and were viewed through a 20x scope for 2 to 3 minutes. An estimated 22,000 scoters passed southward averaging about 35 flocks of 90 birds each per hour. Common Scoters, *Oidemia nigra* (Linnaeus), appeared to predominate.

As relief against peering into the strong, cold wind, I turned to look at the flocks of Snow Geese, Whistling Swans, and ducks on their commuting flights to the Refuge waters, but the real action was over the wind-tossed waves to seaward.

Agricultural Hall, University of Delaware, Newark, Delaware 19711

### AN ALBINO STARLING

JOSHUA WOMELDORF

An apparent partial albino Starling, *Sturnus vulgaris* Linnaeus, appeared about my house near Lexington, Virginia, first on 29 June 1971 with about 25 other Starlings and fed in the trees and adjoining fields almost every day. It was seen eating ripe mulberries on several trees as well as ripe pears and apples.

This unusual bird was creamy white above and brownish white beneath with a yellow bill and a dark stripe above the eye. It seemed a little larger than the other Starlings. It was quite independent, sometimes flying with the other birds and at other times getting a drink of water or bathing in a pond alone.

After the fruit was consumed the flock began feeding in the nearby pasture gathering grasshoppers and other insects. After about 6 weeks the flock of Starlings increased to over 100 birds, their feeding range widened, and the albino was seen less frequently. It was last seen on 15 November 1971. Beside myself, the bird was also seen by Mrs. Allen Moger, Dr. and Mrs. J. J. Murray, Mrs. Malcolm Campbell, Jr., and Timmy Knick.

Route 5, Lexington, Virginia 24450

### A COMMON REDPOLL IN WISE COUNTY, VIRGINIA

DWIGHT E. PEAKE

On 26 November 1971, while observing my feeders on Guest Mountain, Wise County, Virginia, through 7x35 binoculars, I noted an unfamiliar bird on a bare branch in an oak tree about 40 feet from my vantage point close to the

feeders. It remained on the branch for about 2 minutes. I noted its goldfinch size, its pale gray and brown color, its distinct bright red forehead, and black chin mark. Its sparsely streaked sides and rump were also visible as the bird moved on its perch. I identified it as a Common Redpoll, *Acanthis flammea* (Linnaeus).

The bird then flew down to a group of weeds and locust sprouts. Richard H. Peake arrived, observed the bird, noted the field marks mentioned above, and confirmed the identification of a Common Redpoll, a species with which he was familiar. The bird remained in the group of weeds and locust sprouts for another minute. It then flew into the nearby woods.

This record is the first for the Common Redpoll from Wise County and apparently the first record for extreme Southwest Virginia.

P. O. Box 28, Wise, Virginia 24293

## NEWS AND NOTES

**RAVEN PUBLICATION.** This issue of *The Raven* is appearing before the publication of some of the 1971 issues. The earlier ones are expected to be printed and mailed in the next few months.

**GOLDEN EAGLE AT PRESQUILE.** Paul D. Daly, manager of Presquile National Wildlife Refuge, near Hopewell, Virginia, observed an adult Golden Eagle on the refuge on 18 November 1971. This is a first record for this central Virginia area.

**TURKEYS IN ALBEMARLE COUNTY.** Thomas F. Wieboldt reports good numbers of Turkeys about his home in North Garden, Albemarle County, Virginia. His maximum count was 27 on 15 August 1971. These consisted of 2 broods of 11 each plus 5 adults.

**UPLAND PLOVER CONCENTRATIONS.** Many observers reported the Upland Plovers on the airfield at Wallops Station near Chincoteague, Virginia, during the summer and early fall of 1971. Charles R. Vaughn, who censused the birds regularly, found the first 6 on 20 July 1971 and felt that they were continuously present until 8 September. His peak counts were 37 on 29 July and 46 on 19 August, the latter possibility a record number for the state. Mitchell A. Byrd and others found 3 here on the very late date of 23 October 1971. At Langley Air Force Base, in Hampton, Virginia, Robert L. Ake found 1 Upland Plover on 29 July 1971 and a peak of 11 on 20 August.

**BUFF-BREASTED SANDPIPERS AT HAMPTON.** For several days in September 1971 there were abnormal numbers of the usually very rare Buff-breasted Sandpiper at Langley Air Force Base, Hampton. Robert L. Ake found 5 here on 3 September and 6 on 7 September, and Gilbert S. Grant also observed 6 here on 8 September.

# The Raven

JOURNAL OF THE VIRGINIA SOCIETY OF ORNITHOLOGY

VOLUME 43

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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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## 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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## NORTH AMERICAN OSPREY RESEARCH CONFERENCE

MITCHELL A. BYRD

A North American Osprey Research Conference was held in the Millington Hall of Life Sciences at the College of William and Mary in Williamsburg, Virginia, from 10 to 12 February 1972. A total of 75 persons registered for the meeting with numerous other persons attending parts of the sessions.

The conference began on Thursday evening, 10 February, with a social hour in the Campus Student Center. This gathering provided an opportunity for Osprey workers from various parts of the country to become acquainted prior to the opening of the formal sessions.

Three formal papers sessions and three discussion groups were held during the course of the Conference. Twenty-six papers were presented at the Conference. The majority of the papers dealt with the present population status of the species in various parts of the country. Other papers dealt with research techniques, the effects of environmental contaminants on Osprey productivity, and various other aspects of the biology of the species.

The first of the discussion groups, with John C. Ogden as Chairman, dealt with the regional and continental status of the Osprey. It was concluded from this discussion that a report on the present continental status of the species would be highly desirable in the near future as more data become available from different parts of the country.

The second discussion group, chaired by Paul Spitzer, dealt with an evaluation of present and future techniques of Osprey research. Consideration was given to methods of pesticide analysis, the role of trapping and color banding, and the use of such techniques as egg and young manipulation and the induction of second clutches. The technique of inducing second clutches in Ospreys by removal of the eggs immediately after the completion of the first clutch proved successful in Virginia when used by Mitchell A. Byrd and Robert S. Kennedy in their work in 1971. This technique appears to have considerable potential for augmenting the production of these birds and as a possible management technique.

The third discussion group, led by Stanley N. Wiemeyer, dealt with the role of environmental contamination on Osprey reproduction. One of the major points which emerged from this discussion was the feeling that some consistency should be achieved in the future in reporting pesticide and polychlorinated biphenyl levels.

It was pointed out at the Conference that the Osprey would soon be placed on the Federal Protected List if negotiations could be completed with Mexico. It was felt that an American Osprey Committee could effectively function in drawing up a report on the current status of the Osprey in the country and that such a committee might also serve in an advisory capacity to the Bureau of Sport Fisheries and Wildlife with respect to future work on this species. The committee was elected at the conference and the regional representatives are as follows:

Mitchell A. Byrd, Chesapeake Bay Region  
Department of Biology  
College of William and Mary  
Williamsburg, Virginia 23185

John C. Ogden, Southeastern States  
Box 279, Everglades National Park  
Homestead, Florida 33030

Gilbert Fernandez, Northeastern States  
P. O. Box 53  
Dartmouth, Massachusetts 02714

Sergej Postupalsky, Great Lakes Region  
2926 W. 13 Mile Road  
Royal Oak, Michigan 48073

James Koplin, Western States  
School of Natural Resources  
Humboldt State College  
Arcata, California 95521

One recently completed film on the Osprey by Jonathan and Judy Kress was shown on Saturday evening, 12 February, as was a film by Sergej Postupalsky of Royal Oak, Michigan.

It is expected that the Proceedings of the Conference will be published as soon as possible with copies available both to participants in the Conference and to other interested persons.

The complete program of papers was as follows:

#### FIRST PAPERS SESSION

CHAIRMAN: John C. Ogden, Research Biologist, National Park Service, Homestead, Florida.

Introductory Remarks—Mitchell A. Byrd, College of William and Mary, Williamsburg, Virginia.

PAUL SPITZER, Section of Ecology and Systematics, Cornell University, Ithaca, New York. *"Northeastern Coastal Osprey Population: Population Biology and Management Potential"*

ROBERT HERNANDEZ, Connecticut College, New London, Connecticut. *"Northeastern Coastal Osprey Population: Patterns of Pesticide, PCB, and Mercury Contamination"*

JOSEPHINE AND GILBERT FERNANDEZ, Dartmouth, Massachusetts. *"Some Instant Benefits and Long-range Hopes from Color Saturation Banding of Ospreys"*

MARK MACNAMARA, Department of Biology, Hobart College, Geneva, New York. *"Sexing the American Osprey Using Secondary Sexual Characteristics"*

DENNIS PULESTON, Environmental Defense Fund, E. Satauket, New York. *"Status of Ospreys on Gardiner's Island, 1928-1971"*

HERBERT MILLS, World Wildlife Fund, New Jersey Wetlands Institute, Bridgetown, New Jersey. *"Osprey Feeding Problems on the New Jersey Coast"*

JOSEPH JACOBS, Pennsauken, New Jersey. "*Comparison of Osprey Nesting Success between the 1940's and 1970's in Cape May County, New Jersey*"

STANLEY WIEMEYER, Section of Environmental Studies, Patuxent Wildlife Research Center, Laurel, Maryland. "*Reproductive Success of Potomac River Ospreys—1971*"

### SECOND PAPERS SESSION

CHAIRMAN: Gilbert Fernandez, Dartmouth, Massachusetts.

JAN REESE, St. Michaels, Maryland. "*Central Chesapeake Bay Osprey Nesting Success*"

LEON RHODES, Tennessee National Wildlife Refuge, Paris, Tennessee. "*Success of Osprey Nesting Structures at Martin National Wildlife Refuge*"

FREDERICK SCHMID, Sag Harbor, New York. "*A 1934 vs. 1967 Comparison of the Osprey Nesting Populations in Northumberland County, Virginia*"

ROBERT S. KENNEDY, Department of Zoology, Louisiana State University, Baton Rouge, Louisiana. "*Increased Productivity of Ospreys Caused by Clutch Manipulation and Renesting*"

JAMES PARNELL, Department of Biology, University of North Carolina, Wilmington, North Carolina. "*Osprey Studies in Coastal North Carolina*"

JOHN OGDEN, Research Biologist, National Park Service, Homestead, Florida. "*Characteristics of the Florida Bay Osprey Population*"

CHARLES SINDELAR, Waukesha, Wisconsin; JAMES GRIER, Cornell University, Ithaca, New York; and DAVID EVANS. "*Reproduction of Ospreys on Lake of the Woods, Ontario*"

SERGEJ POSTUPALSKY, Royal Oak, Michigan. "*Osprey Status in Michigan and the Lake Nipigon Area of Ontario*"

CHARLES J. HENNY, Research Biologist, Patuxent Wildlife Research Center, Laurel, Maryland; TED VAN VELZEN, Migratory Bird Populations Station; and BRIAN SHARP, Migratory Bird Populations Station, Laurel, Maryland. "*Wintering Areas of Ospreys From Various Areas of North America, Based on Band Recovery Data*"

THOMAS DUNSTAN, Western Illinois University, Macomb, Illinois. "*Radio-telemetric Techniques for Osprey Research*"

JOHN C. OBERHEU, Division of Refuges, Bureau of Sport Fisheries and Wildlife, Atlanta, Georgia. "*Status of Ospreys on National Wildlife Refuges*"

### THIRD PAPERS SESSION

CHAIRMAN: Mitchell A. Byrd, College of William and Mary, Williamsburg, Virginia.

ALEXANDER SPRUNT, IV, and EUGENE KNODER, National Audubon Society, Tavernier, Florida. "*Report on Osprey Sightings and Nest Locations in Coastal Mexico and British Honduras*"

GARY J. SCHROEDER and DONALD R. JOHNSON, Department of Biological Sciences, University of Idaho, Moscow, Idaho. "*Productivity and Food Habits of Northern Idaho Ospreys*"

GORDON LIND, Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon; and HANDLEY ROBERTS, Salmon, Idaho. "*The Status of Ospreys in Oregon*"



JAMES KOPLIN, School of Natural Resources, Humboldt State College, Arcata, California. "*Reproductive Performance of Montana and California Ospreys: Influence of Food Supply—A Comparative Analysis*"

DONALD MACCARTER, Lakeville, Minnesota. "*Reproductive Performance and Population Trends of Ospreys at Flathead Lake, Montana*"

DOUGLAS MACCARTER, Columbus, Montana. "*Food Habits of Ospreys in Relation to Their Reproductive Performance at Flathead Lake, Montana*"

CHARLES SINDELAR, Waukesha, Wisconsin. "*Status of Ospreys in Wisconsin*"

Department of Biology, College of William and Mary  
Williamsburg, Virginia 23185

## MOVEMENTS OF DISPLACED EASTERN WILD TURKEYS\*

JOSEPH C. SHUGARS

The eastern wild Turkey (*Meleagris gallopavo silvestris*) is a very wary, secretive bird, and thus few details are known of its behavior. This study, using biotelemetry in conjunction with field signs, sought to determine displacement behavior of live-trapped, wild Turkeys released into unoccupied but suitable range near Holston, Washington County, Virginia. It was concluded that displaced wild Turkeys do not disperse widely, and this characteristic may be a major factor in success of most stocking programs.

Stocking programs designed to establish populations in extralimital areas where Turkeys previously did not exist have been successful in California, Washington, Montana, and Oregon. Programs to reestablish populations in areas within the ancestral range, from which the wild Turkey has been extirpated, have been carried out with great success in many other states, including Virginia.

There are several practical reasons for investigating displacement behavior of game birds as this behavior may determine the success or failure of any stocking program. Probably the most important reasons are: (1) to determine distances between release points; (2) to estimate time required for various sized releases to expand and occupy available range; and (3) to determine habitat preference of the released Turkeys.

The objective of this study was to determine the extent of movements of 24 live-trapped, wild Turkeys released in suitable range. The movements of these liberated Turkeys were recorded by radiolocating four instrumented birds and by map-plotting field "sign."

Radiotracking of wild animals is a relatively new technique which permits (1) locating instrumented individuals remotely and, by changes in signal tone, giving some indication of the animals' activity; (2) collecting a quantity of data in a short time; and very importantly (3) collecting this information with no observer-caused disturbance of the wild animal.

The radio transmitters used weighed about 8 oz. and were about as large as a pack of cigarettes. They were designed to give a continuous-tone signal with a

\* Release 71-9 of the Virginia Cooperative Wildlife Research Unit, Virginia Commission of Game and Inland Fisheries, Virginia Polytechnic Institute and State University, Wildlife Management Institute, and Bureau of Sport Fisheries and Wildlife cooperating.

maximum life of 150 days and a range of 4 to 5 miles line-of-sight. Each transmitter was attached to the Turkey on the back between the wings by surgical tubing securely taped to the transmitter and snugly tied with a square knot under each wing. This procedure allowed free movement of the wings for flying, was easy to accomplish, and permitted the Turkey to cast off the transmitter after about one year due to dry-rotting of the surgical tubing. The receiver was a small hand-held model powered by a 6-volt lantern battery and equipped with a loop-type (bidirectional) antenna. The receiver translated the selected radio-frequency signal into an audible sound.

In use, a null, the position of minimum signal strength heard during rotation of the antenna, was determined from a known field location. At null, the loop of the antenna was perpendicular to the direction of the transmitter. The compass bearing of the radio-signal direction was determined. I then moved, as rapidly as possible, to another known field location and repeated the procedure, thus obtaining two bearings. Intersection of these compass bearings indicated the location of the transmitters. All locations obtained were plotted on a map.

Accuracy of this technique was surprisingly good as it was possible to locate a stationary transmitter within a radius of 25 feet from a distance of a mile. The greatest single factor affecting accuracy in the field was movement of the instrumented birds between two successive observations. This source of error can be calculated by plotting three or more bearings and determining a triangle of error. This can be minimized by using two observers each equipped with a receiver to obtain simultaneous bearings.

Wild Turkeys formerly occurred in Washington County but were extirpated from this section some 40 to 50 years ago. The Turkey disappeared from this area in the 1920's following the completion of large-scale logging of virgin timber. Since that time, the forest growth has matured sufficiently to indicate that the habitat is again suitable for the bird. Thus, the Virginia Commission of Game and Inland Fisheries has a program to reestablish the populations by liberating live-trapped Turkeys.

As a part of this reintroduction program, 24 Turkeys were released on the study area between 11 and 28 October 1970. These birds had been live-trapped from the Gathright Wildlife Management area near Hot Springs, Virginia. On 18 October 10 Turkeys were released, 4 being equipped with transmitters, and each transmitter was on a different frequency to permit identification of each individual bird. One transmitter frequency was blocked by local radio interference. The other three transmitters yielded a total of 31 contacts over a 17-day period. At this point transmitter failure was suspected. Twenty-two days after suspected transmitter failure, a signal was heard. After determining the signal source, a transmitter was recovered from the remains of a Turkey which had been killed by a predator. This transmitter operated intermittently, and an examination by the designer disclosed a flaw in the antenna connection.

After radio contact with the instrumented Turkeys was lost, study was continued by map-plotting field signs. Field sign consisted of scratchings, droppings, tracks, and sightings of Turkeys. Since there was no means for separating the instrumented individuals from the other Turkeys in this liberation, the field signs were based on the total number of birds released in this area. Field signs were recorded on a map of the area for a 93-day period.

The telemetry records indicated that the instrumented Turkeys remained near the release site and moved over an area of 194 acres during the 17-day period. The field signs recorded over a 93-day period indicated that the mini-

home range used during this period was about 413 acres. Studies have indicated that home range of resident flocks averages between 425 and 840 acres (Ellis and Lewis, 1967; Lewis, 1967; Raybourne, 1968).

As shown by these data, dispersal movements of the released Turkeys was not extensive. They can best be described as a slow, gradual extension of range in a general northeastward direction following lower slopes of Clinch Mountain. (It is also interesting to note that most of these records occurred in a timber type containing white oak as a part of the overstory.)

In summary, this investigation confirms general observations collected in previous wild Turkey trap-transplant restocking programs. Many restocking efforts with gallinaceous game birds, using either game farm or wild-trapped stock, have been unsuccessful apparently because the liberated birds dispersed widely from the liberation site. Wild-trapped Turkeys, however, do not display this dispersal characteristic when displaced into suitable habitat. This behavioral trait may account for the very successful results achieved in wild Turkey trap-transplant restocking programs throughout the United States.

### Literature Cited

Ellis, J. E., and J. B. Lewis

1967. Mobility and annual range of wild Turkeys in Missouri. *Journal of Wildlife Management*, 31(3): 568-581.

Lewis, J. B.

1967. Life history investigations of wild Turkeys with special emphasis on mobility and behavior. Missouri Wild Turkey Studies, Federal Aid Project No. 13-R-21, Job Completion Report, Missouri Conservation Commission (mimeographed).

Raybourne, J. W.

1968. Telemetry of Turkey movements. M. S. Thesis, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

Division of Forestry and Wildlife Sciences  
Virginia Polytechnic Institute and State University  
Blacksburg, Virginia 24061

## NORTHWARD MOVEMENT OF WOOD DUCKS AFTER THE NESTING SEASON

PAUL A. STEWART

A recent anonymous note in *The Raven* (40:26), "Wood Duck Recoveries Span 1100 Miles," listed ten recoveries of Wood Ducks, *Aix sponsa* (Linnaeus) banded at Dillbeck and Strasburg, Virginia, by George M. Smith. All of the ten recoveries were of birds banded during the nesting season in April and May and hence were adult birds. Four of these birds were males recovered in the fall immediately following banding, thus being direct recoveries, as noted in Table 1.

TABLE 1. *Direct recoveries of Wood Ducks banded in Virginia by George M. Smith.*

<i>Band No.</i>	<i>Banded</i>	<i>Recovered</i>	<i>Distance (mi) and direction traveled</i>
575-62258	Dillbeck, Va. 4/15/67	Newberry, Fla.	690 SSW
575-62263	Strasburg, Va. 4/16/67	Lakefield, Ont.	350 NNW
575-62265	Strasburg, Va. 4/17/67	Barrie, Ont.	390 NNW
575-62282	Dillbeck, Va. 4/29/67	Sugar Lake, Pa.	? ? ?

It is noteworthy that three of these four birds went northward. This is a surprisingly high proportion going northward after the nesting season as compared with those going southward both at the same time and later in southward migration, suggesting that this northward movement may often be made by adult males. It is well known that many species of birds, particularly ducks, travel northward after the nesting season, but the birds making these movements are usually found to be immature birds, rather than adults.

Most Wood Ducks earlier banded were females taken from their nests or birds of both sexes and of various ages captured after northward movement had occurred in the late summer; thus few males have been banded during the nesting season. The possibility that these birds were enroute northward when they were captured for banding seems unlikely, for even the latest nesting Wood Ducks should have had nests in progress in Pennsylvania and Ontario when these birds were captured in Virginia.

The two birds recovered in Ontario had both traveled more than 350 miles northward to near the northern limit of the breeding range of the Wood Duck. I was unable to find Sugar Lake, Pennsylvania, in an atlas and was thus unable to determine the distance traveled by the third bird.

This sample suggests that northern hunters may bag a substantial proportion of adult male Wood Ducks bagged after nesting in the southland. Four birds, of course, provides a much smaller sample than is to be desired.

I am grateful to George M. Smith for permission to use his data in preparation of this note.

203 Mooreland Drive, Oxford, North Carolina 27565.

## YELLOW RAIL ON FISHERMAN ISLAND

DAVID W. SONNEBORN

On 26 February 1972 the Virginia Commonwealth University ornithology class was studying birds on Fisherman Island, Virginia, at the southern tip of the Delmarva Peninsula. Three of the students, L. Farrar, D. Hayward, and R. L. Svendsen, and I were walking in a dry grassy area with a few bushes about 1 mile east of U. S. Route 13 when a Yellow Rail, *Coturnicops noveboracensis* (Gmelin), one of the most elusive and hence least known of North American

birds, flew up from underneath my feet. I chased after the bird for several steps yelling to draw the attention of the students to the bird and then stopped and observed the bird with 7x binoculars as it flew approximately 75 feet. The white wing patch close to the body, general coloration, head, and bill were all observed, and there was no question in my mind as to the identity of the bird. I had previously seen this species in Louisiana.

Each of the students was questioned independently and each referred to the white wing patch. Also, they agreed that although the bird was much smaller, its flight pattern was similar to that of a Clapper Rail which had been seen a few minutes earlier.

Virginia Commonwealth University  
Richmond, Virginia

## PEREGRINE FALCON IN DOWNTOWN NORFOLK

DAVID L. HUGHES

On Monday, 4 October 1971, I observed a Peregrine Falcon in downtown Norfolk. At approximately 8:30 a.m. I was walking to work from the city parking lot at the base of St. Paul's Boulevard. As I crossed Waterfront Drive, an adult Peregrine Falcon, *Falco peregrinus* Tunstall, flew up and across this four-lane road, coming up from an old warehouse and tug-boat dock on the Elizabeth River. It passed in front of me about 20 to 30 yards away and about 30 feet in the air. It climbed straight up abruptly, circled around once, and dove straight down. Catching the wind, it shot back up and landed on the roof of the Virginia National Bank headquarters building, the tallest building in the state! I waited a few minutes for him to reappear, but he never did. I went on to work and never saw the bird again.

5103 Powhatan Avenue, Norfolk, Virginia 23508

## BIRDS AT THE FOOT OF THE RAINBOW

CHARLES O. HANDLEY, SR.

Once when I was a small boy I was fascinated with a beautiful rainbow which seemed to end in a nearby meadow. My father assured me: "If you can reach the foot of the rainbow you will find a pot of gold." Although I recalled the legend many times, it was not until years later, and with much astonishment, that I found it to be true.

One afternoon while I was observing birds on the beach at Assateague Island on the northeastern coast of Virginia, I spotted a flock of Snow Buntings. Their beautiful brown and white plumage shone brilliantly as they foraged amongst the green and brown beach grass. Then a dark cloud gathered over the ocean. There were flashes of lightning, and thunder rolled across the water. Streaks of rain extended from the clouds to the surface of the ocean. To the west the sun still shone brightly beneath the approaching clouds.

As if by magic the scene before me changed. Suddenly the dress of the buntings became a lovely soft pink and brown, and the beach grass waving gently

in the breeze was brilliant gold. I was at the foot of the rainbow! The vision seemed so real that I felt at that moment with a hand scythe I could have harvested a haystack of gold.

Seconds later the brief shower and rainbow passed and the illusion faded. The beach grass was no longer pure gold, and the buntings resumed their normal dress of brown and white. For an instant the pot of gold had been mine. Now it remains with me as a memory of a golden meadow inhabited by a flock of pink and brown birds.

Route 2, Box 83-W, Lewisburg, West Virginia 24901

## THE 1972 VSO ANNUAL MEETING

ROBERT J. WATSON

The 1972 meeting of the Virginia Society of Ornithology took place in Fredericksburg, Virginia, on 21, 22, and 23 April. The Northern Virginia Chapter and Mary Washington College served as hosts. All the proceedings, except the field trips and the banquet, were held in the Morgan Combs Science Hall at the College.

Dr. William C. Pinschmidt, of the Mary Washington College Department of Biology, opened the evening session on Friday, 21 April, at 8:10 p.m., acting in place of the Department chairman, Dr. Rosemary Johnson, who was absent owing to ill health. Dr. Grellett C. Simpson, Chancellor of the College, extended an official welcome, to which Dr. Mitchell A. Byrd, President of the VSO, responded.

Dr. Byrd called for a report from the Nominating Committee (consisting of Mr. James W. Eike, chairman, Mrs. E. A. Lancaster, and Mrs. Myriam Moore). Mr. Eike submitted the following 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 1975*

Dr. Robert L. Ake, Norfolk

Mr. John Cacciapaglia, Falls Church

Dr. Richard H. Peake, Wise

A motion that the nominations be closed, and that the Secretary be instructed to cast a unanimous ballot for the above nominees, was approved.

Following several routine announcements, President Byrd recognized Mr. C. W. Hacker, who commented that *The Raven* had been behind schedule for several years and expressed dissatisfaction with current efforts to catch up. He submitted a motion that the first issue of *The Raven* put out for 1971 be denoted Volume 42, Nos. 1-4, and that each succeeding issue be given a double number until such time as the calendar date and the issue date coincide. This motion was seconded.

Mr. Watson, commenting on the motion, urged members to accept the judgment of the Editor, who believed that the motion would not accomplish its purpose and would generate an excessive amount of correspondence in the form of inquiries and complaints. Mr. Scott confirmed that these were his views. Dr. Byrd stressed that the difficulty with *The Raven* is in no sense the fault of the Editor, and that a major reason for the continuing delay is the burden of work that Mr. Scott has to perform, in working up data (such as census counts) into condition for publication.

Dr. Byrd asked Mr. Hacker whether the intent of his motion was that the next issue should be the equivalent of four in length, or whether it was desired simply to take issues of ordinary length and redesignate them. Mr. Hacker replied that this should be left to the Editor to decide how large an issue could be assembled within a reasonable period of time.

It was suggested that, as an alternative mode of procedure, the Editor might resume publication on a current basis (i.e., using current material) and simply fill in the missing issues as time permits. Mr. Scott expressed the belief that such a procedure would be feasible. Dr. J. J. Murray, Jr., observed that the result would be innumerable queries about intervening issues. It was pointed out that this difficulty might be avoided if a suitable explanatory notice were bound in each current issue. Mr. David Roszell moved to amend Mr. Hacker's motion in accord with the above suggestion. The President ruled that such an amendment would have to be offered as a substitute motion, since it would completely change the sense of the original. Mr. Roszell thereupon submitted a substitute motion that *The Raven* be published on a current basis, with intervening issues to be put out as feasible. The motion was seconded and passed, accompanied by some rather confused discussion about its precise status. The President eventually ruled that it had properly passed and that a motion by Dr. Murray to recommit the whole subject to the Board of Directors was therefore out of order.

There being no other business, Dr. Byrd turned the meeting over to Mr. Ben B. Warfield, chairman of the Program Committee. Mr. Warfield introduced Mr. Lynn Greenwalt, Chief, Division of Wildlife Refuges, Department of the Interior, who spoke on the present status of, and future plans for, the nationwide system of refuges, accompanying his remarks with an excellent motion picture.

The field trips on Saturday morning, 22 April, took place in a heavy rain. All three were held as scheduled, but most were cut short, and the effect on both birds and attendance was notable.

Dr. J. J. Murray, Jr., Vice President of the Society, presided at the Saturday afternoon session opening at 1:55 p.m. Dr. Mitchell A. Byrd, the first speaker, described "Techniques for Increasing the Productivity of Ospreys." After summarizing statistics showing the decline of breeding Ospreys in Virginia, he turned to remedial measures worked out at William and Mary College under his supervision, which offer promise of reversing the trend. Clutches of eggs were taken from Osprey nests, carefully transported to a laboratory, and incubated. The young were fed for a time on chopped fish and were then replaced in Osprey nests, either those with infertile eggs or those containing young already hatched. In each case the "strangers" were accepted and cared for by their new foster parents.

Miss Susan Ridd, a student at Mary Washington College, reported on "Birds at the Westmoreland State Park." Assisted by a colleague, Miss Ridd studied



two sample tracts, one a parking area interspersed with a grove of pines, the other a stand of deciduous trees within the nearby forest. Noteworthy differences were observed in the bird life of these areas during the period from 20 March to 10 May 1971.

The common practice of creating clearings within forests to increase the production of game birds and animals was the subject of an evaluation by Mr. Dennis Martin, of the Virginia Polytechnic Institute and State University. Young wild Turkey poults were allowed to feed in a selected sample of such clearings; they were then killed and their crops examined. At the same time, samples of insect life from the study areas were collected with a special apparatus. The findings showed that the Turkeys apparently did not use the clearings any more extensively than the adjacent forest, even though the population of insects in the clearings might be 25 times as great.

"Raptor Banding at Dulles International Airport" was a project undertaken by Mr. William S. Clark, who had found that the open fields and woods surrounding this airport provide excellent habitat for predatory birds, both diurnal and nocturnal. By extensive trapping in an area of approximately 15 square miles, Mr. Clark located ten species of hawks and five of owls, several of which nested in or near the area.

Dr. Alexander Wetmore figuratively took his hearers on a bird walk of the Miocene epoch, some ten million years ago, as he described fossil birds from the coastal plain of Virginia and North Carolina. Most species included in these remains consist of water birds (exclusive of ducks, geese, and swans). The most intriguing find so far, according to Dr. Wetmore, has been a bird known only from incomplete fragments, having a large bill with tooth-like projections; it appears to be related to the pelicans.

A six-year study of bird populations in the "new city" of Columbia, Maryland, between Baltimore and Washington, was summarized by Dr. Aelred D. Geis, of the Patuxent Wildlife Research Center. He employed roadside counts and surveys on foot and studied both breeding and wintering birds. Of ten species on which he focused attention, six decreased in number between 1966; three others (the Mockingbird and the Song and Chipping Sparrows) actually increased, while the Cardinal held its own. The speaker stressed a need for more careful studies of birds in urban environments and for action to develop greater public awareness of birds in cities.

Mr. Henry Stebbins, of The Nature Conservancy, reviewed the history of this organization and described some of the methods used by the Conservancy in acquiring and preserving land. With specific reference to Virginia, Mr. Stebbins stressed the need for an inventory of natural areas as a basis for establishing priorities for acquisition, and also the importance of properly supervising natural areas when acquired.

The Hon. Joseph Rowe, Mayor of Fredericksburg, gave a balanced but generally critical appraisal of the controversial Salem Church Dam, which the Corps of Engineers proposes to construct on the Rappahannock River. Tracing the history of the project since its inception in 1933, he showed that it began as a flood-control measure but is now being justified on the basis of power production, water supply, and recreation. The speaker pointed out that the crowds of people attracted by such a project would completely alter the character of nearby communities and urged that possible alternatives for water supply be carefully studied.

Dr. Richard L. Zusi, Curator of Birds at the National Museum of Natural History, displayed his own motion picture on "Feeding Habits of the Black Skimmer." He drew attention to the adaptation of the bird's bill for its method of feeding, which was clearly illustrated in the film.

The annual banquet was held at the Robert E. Lee Room of the Holiday Inn, on the southern edge of Fredericksburg. Dr. Byrd, the presiding officer, introduced those sitting at the head table and commented on the absence of Dr. J. J. Murray, Sr., who, he believed, had attended every previous VSO meeting. A round of applause was tendered to Dr. Murray in absentia.

The President announced that, at a meeting of the Board of Directors on 25 March, two new chapters, in Danville and Marion, had been approved for affiliation with the VSO.

Mrs. James W. Eike, who had been in charge of registration for the meeting, reported that 125 persons had registered. This was approximately the number of those present at the banquet.

On behalf of the Resolutions Committee, consisting of herself and Mrs. Carole Massart, Mrs. James W. Wiltshire tendered resolutions extending thanks to all those responsible for the success of the meeting: Chancellor Simpson and the staff of the Biology Department of Mary Washington College, various members of the Northern Virginia Chapter, the speakers (particularly Dr. Wetmore), and Dr. Byrd. These resolutions were informally approved without vote.

The principal speaker of the evening was Dr. James A. Mulligan, S.J., of the Department of Biology, St. Louis University, currently a Fellow of the Woodrow Wilson Center for Scholars at the Smithsonian. His subject was "Bird Song: Repetition and Variability in Some Western Sparrows." Focusing attention on the Song Sparrow and several closely related species (Lincoln's, Fox, and Swamp Sparrows), he learned that each individual bird has a repertoire of as many as 15 slightly different songs, which it varies according to a "programmed" pattern. In itself, variation in song seems to serve the purpose of preventing the song from losing its effect through constant repetition, as is normally the case with any stimulus. However, the reason for such a high degree of variation remains to be discovered through further research. The speaker felt that climatic factors might be involved.

Following Dr. Mulligan's address, Dr. Byrd announced that it was tentatively planned to meet next year at Mountain Lake. The meeting then adjourned and members retired to prepare for another round of field trips the next morning, for which, as it turned out, the weather was far more propitious.

2636 Marcey Road, Arlington, Virginia 22207

## VSO FINANCIAL STATEMENT FOR 1971

### CASH BALANCE 1 JANUARY 1971

General Fund .....	626.02	
Endowment Fund .....	720.00	
Publication Fund .....	2,539.50	\$3,885.52

## CASH RECEIPTS

Membership dues and subscriptions .....	\$1,799.00	
Sales of publications .....	64.00	
Sales of decals .....	15.00	
Sales of arm patches .....	42.75	
Interest .....	183.87	\$2,104.62

## CASH DISBURSEMENTS

<i>The Raven</i> .....	\$1,799.51	
Newsletter .....	144.94	
Virginia Wildlife Federation .....	132.50	
National Audubon Society .....	25.00	
Treasurer .....	69.40	
Secretary .....	8.81	
Arm patches and decals .....	256.75	
Printing of membership applications .....	32.14	\$2,469.05

## CASH BALANCE 31 DECEMBER 1971

General Fund .....	\$ 93.59	
Endowment Fund .....	850.00	
Publication Fund .....	2,577.50	\$3,521.09

Total 1971 membership: 664, including 450 active, 144 sustaining, 43 junior, 14 life, and 13 chapter members.

MARGARET H. WATSON, Treasurer

## NEWS AND NOTES

**RAVEN PUBLICATION.** This issue of *The Raven* is appearing before the publication of some of the 1971 issues. The earlier ones are expected to be printed and mailed in the next few months.

**FEDERAL PROTECTION FOR HAWKS AND OWLS.** On 9 March 1972 an amendment to the Migratory Bird Treaty Act was signed in Mexico City extending federal protection to all previously unprotected species in 32 families of birds. Now covered are all vultures, hawks, and owls; crows and jays; and many water birds, such as cormorants, pelicans, kingfishers, gulls, terns, storm petrels, and many others. Many species in these families were already covered.

**FLAMINGO AGAIN AT CHINCOTEAGUE.** An American Flamingo appeared at Chincoteague National Wildlife Refuge, Virginia, on 20 November 1971 (*vide* J. C. Appel) and was seen literally by hundreds of persons during "Wildlife Week" late in the month, including J. M. Abbott, Harry and Edmund LeGrand, and C. R. Vaughn. It remained until just after Christmas, according to refuge personnel, but was missed on the Christmas count on 28 December. However, apparently the same bird was recorded on the nearby Ocean City, Maryland, Christmas count on 29 December 1971. Like the two other recent

Flamingo reports in Virginia (*Raven*, 40: 83, 1969; *ibid.*, 41: 39, 1970), the bird was wary, in good color, and flew strongly; yet its origin will probably remain a matter of dispute.

**GODWITS AGAIN FOUND.** Hudsonian Godwits were present at Chincoteague Refuge for much of the late summer and fall of 1971. First recorded (1 bird) on 8 August (C. R. Vaughn), there were several other reports in August and September with peaks of 5 on 28-29 August (J. M. Abbott) and 4 on 26 September (P. G. DuMont and others.) The last report was of 3 on 2 October (C. W. Carlson). The Marbled Godwit was first reported at Chincoteague Refuge on 31 July, when the peak count of 8 was recorded (*vide* J. C. Appel). There were numerous other reports here and nearby of up to 6 birds throughout the fall by many observers, including J. M. Abbott, M. A. Byrd, C. W. Carlson, P. G. DuMont, C. O. Handley, Jr., and Darelyn Handley, F. R. Scott, and C. R. Vaughn. There were still at least 3 birds present on 27 November (DuMont and Vaughn).

**AVOCETS RETURN.** The by-now regular late summer concentration of American Avocets at Chincoteague National Wildlife Refuge was first noted on 8 August 1971 when 20 were found (C. R. Vaughn). The flock apparently fluctuated in numbers during the early fall and peaked in October and early November, the maximum count being 75 on 11 October (C. O. Handley, Jr., and Darelyn Handley.) The last report here was of 53 on 14 November 1971 (Vaughn). At Craney Island Disposal Area, in Portsmouth, 34 American Avocets were first noted 20 July 1971 (G. S. Grant), and the peak report was 65 on 23 August (Grant.) Apparently, the birds remained throughout the fall and at least most of the winter. Grant found 30 here on 18 December, and there were 25 still present on 30 January 1972 (D. L. Hughes and the Cape Henry Bird Club).

**BLACK-NECKED STILTS SUMMER.** Three Black-necked Stilts were noted at Wallops Island, Virginia, on 8 May 1971 by Isaac Sanchez and C. R. Vaughn. At nearby Chincoteague Refuge, J. M. Abbott found 2 on 23 May, and according to J. C. Appel, 1 or 2 were present all summer beginning 1 July, although G. S. Grant found 3 on 24 July. The last report was 1 bird on 29 August 1971 (Abbott).

**POMARINE JAEGER AT CHINCOTEAGUE.** On 12 September 1971 C. O. Handley, Jr., and Darelyn Handley observed a Pomarine Jaeger chasing a Common Tern along the beach at Chincoteague Refuge. The elongated central tail feathers were about 1 inch long and definitely blunt, not pointed.

**LATE HOUSE WREN NESTING.** According to Ruskin S. Freer, Mrs. Roy Campbell, of Lynchburg, Virginia, found 5 young House Wrens off the nest on the very late date of 21 September 1971.

# 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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## 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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# RECOVERIES OF ROYAL TERNS BANDED IN VIRGINIA

## PART I. THE CARIBBEAN

WILLET T. VAN VELZEN AND RICHARD D. BENEDICT

The Royal Tern, *Thalasseus maximus* Boddaert, breeds in large colonies along the eastern coast of the United States from Georgia north to Maryland. During the last two decades many thousands of these large terns have been banded, especially in the states of Virginia and South Carolina. Very little, however, has been published concerning the recoveries of these bands. This report, with those previously published (Van Velzen, 1968 and 1971), provides a good picture of the winter distribution of this species and the primary means by which recoveries are obtained.

In an earlier paper (Van Velzen, 1968) the dispersal pattern of Royal Terns banded in 1964-65 was presented from birds nesting on Fisherman and Smith Islands, Northampton County, Virginia. Continued banding in this area during 1966 and additional recoveries of the 1964-65 seasons provide the information used in this paper, giving additional support to the movement pattern suggested previously by a smaller number of recoveries.

In this report the distribution of the 33 recoveries from the Caribbean area is as follows: Bahama Islands, 2; Cuba, 3; Dominican Republic, 11; French West Indies, 3; Haiti, 1; Jamaica, 8; Puerto Rico, 2; Trinidad, 1; and At Sea, 2. Details concerning each recovery are presented in Table 1, and the distribution of the recoveries is mapped in Figure 1.

About 42% of the recoveries were received during the birds' first winter, and another 21% were received from their wintering grounds during late spring and early summer the first year after being fledged, showing that these birds apparently do not return to breed the first year. Recoveries from the wintering grounds in April and May of their second year confuse the picture somewhat, and it is difficult to know if some birds depart for the north very late, do not breed in their second year, or if the date received by the finder is incorrect. August and September recoveries, following fledging and subsequent years, show that the terns depart for the south very early in the season, although some also wander north as far as New Jersey.

As previously found, the largest percentage of recoveries was scattered fairly evenly along the eastern and western coasts of Florida and the Keys. The remainder are scattered throughout the Caribbean, with recoveries coming from all the major islands, and the balance from the Eastern Coast of the United States, and Central and South America. As has been noted before, no recoveries were obtained from the East Coast of South America. At least 42% of the terns were shot, and it is likely that others should also be included in this total if their actual manner of recovery could be determined. The remainder were obtained through other means as shown in Table 1.

TABLE 1. *Caribbean recoveries of Royal Terns banded in Northampton County, Virginia. Dates are given in the form used by the Bird Banding Laboratory (month, day, year).*

Band Number	Recovery Location	Date Banded	Date Recovered	How Obtained
BAHAMAS				
655-66880	Riding Rock .....	07-14-66	02-03-68	56
-66884	Georgetown, Exuma .....	07-14-66	07-11-67	47
CUBA				
655-09018	Manzanillo .....	06-28-66	10-20-67	59
665-14200	Mayari .....	06-29-66	*11-12-67	59
-33492	Cascarero .....	06-28-66	*01-28-67	59
DOMINICAN REPUBLIC				
625-18108	Rio San Juan .....	07-28-64	10-28-71	52
-18284	Bani .....	06-28-65	*02-08-69	60
655-66571	Pendernales .....	07-14-66	*03-14-67	56
-66988	Luperon .....	07-14-66	12-08-66	59
-85261	Miches .....	07-21-66	03-29-67	59
-85049	Miches .....	07-21-66	09-16-68	59
665-33156	Duverge .....	06-28-66	04-16-68	60
-33205	Los Frailes .....	06-28-66	05-10-67	26
-33315	La Romana .....	06-28-66	*12-06-66	60
-33363	Boca Chica .....	06-28-66	02-11-67	59
726-27357	Monte Christi .....	06-28-66	10-19-66	04
FRENCH WEST INDIES				
625-13737	St. Kitts .....	07-08-65	*05-09-66	60
655-85013	Guadeloupe .....	07-21-66	12-26-66	59
-85305	St. Martin .....	07-21-66	05-18-67	59
HAITI				
625-18642	Jeremie .....	07-09-65	11-30-69	47
JAMAICA				
625-18893	Black River .....	07-09-65	06-11-66	60
655-66655	Kingston .....	07-14-66	02-11-67	26
-66777	Kingston .....	07-14-66	02-14-70	26
-92224	Port Antonio .....	07-26-67	11-03-67	60
665-14472	Savanna la Mar .....	06-29-66	10-03-67	59
-33030	Oracabessa .....	06-28-66	11-13-66	26
-33117	Savanna la Mar .....	06-28-66	12-10-66	26
-33321	Parottee .....	06-28-66	10-18-66	59
PUERTO RICO				
665-14813	Ponce .....	06-28-66	11-26-70	59
655-85012	Guayanilla .....	07-21-66	12-20-66	59



<i>Band Number</i>	<i>Recovery Location</i>	<i>Date Banded</i>	<i>Date Recovered</i>	<i>How Obtained</i>
TRINIDAD				
665-14007	Port of Spain .....	06-29-66	11-22-70	59
AT SEA				
665-33095	18° 50'N, 83° 50'W .....	06-28-66	04-06-67	53
-33198	21° 30'N, 83° 10'W .....	06-28-66	11-28-69	56

\* Letter date only.

*How Obtained Codes:*

04	Caught in trap	52	Injured
26	Entangled in fishing gear	53	Exhausted
28	Caught by hand	54	Killed
47	Found dead	56	No information
51	Sick	59	Shot

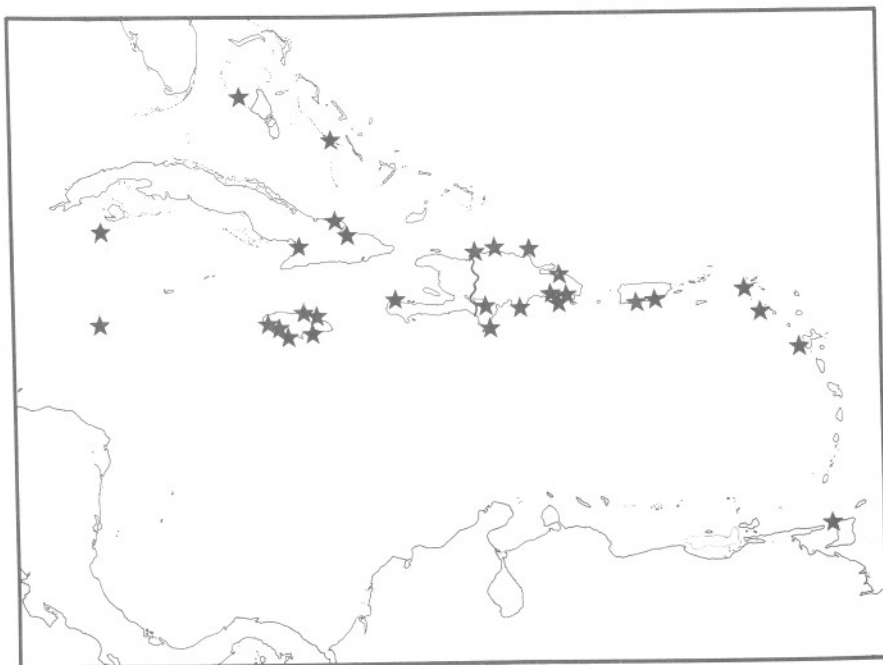


FIGURE 1. Distribution of Caribbean recoveries of Royal Terns banded in Virginia.

**Literature Cited**

Van Velzen, W. T.

1968. The status and dispersal of Virginia Royal Terns. *Raven*, 39: 55-60.

1971. Recoveries of Royal Terns banded in the Carolinas. *Chat*, 35:64-66.

Migratory Bird Populations Station  
Laurel, Maryland 20810  
and 4615 Donald St., Eugene, Oregon 97405

## BANDING RESULTS AT KIPTOPEKE BEACH DURING THE AUTUMN OF 1971

F. R. SCOTT

For the ninth successive year a bird-banding station was operated during the fall migration of 1971 at Kiptopeke Beach, Virginia, under the sponsorship of the Virginia Society of Ornithology. The station was open during the 51-day period from 4 September to 24 October 1971. Details of the banding site and general operation of the station were most recently described two years ago and won't be repeated here (Scott, 1970). The general 1971 results are shown in Table I in comparison with those of the previous two years.

TABLE 1. *Comparative statistics of 3 years of banding at Kiptopeke Beach, Virginia. Details of the banding results for 1969 and 1970 have been published previously (Scott, 1970 and 1971).*

	1969	1970	1971
New birds trapped .....	10,576	13,497	9,680
Total species .....	104	97	101
Total net-hours .....	18,439	14,178	13,403
Trapping efficiency, new birds/100 net-hr. ....	57	95	72
Days of operation .....	58	51	51

The number of new birds trapped was the lowest since 1967, and as shown in the table, the trapping efficiency dropped some 24% from 95 (in 1970) to 72 new birds per 100 net-hours. There were 738 repeats (birds retrapped within a 90-day period at the same station) and 17 returns of birds banded here in previous years. No birds banded elsewhere were trapped at Kiptopeke Beach in 1971.

The relatively poor showing of the station in 1971 was undoubtedly due principally to the weather, which was the worst for banding in the 9-year history of the station. Because of rain, nets were closed all day on 4 days and half day or more on several other days. As in 1967, long periods of northeasterly winds seemed to shift migrating birds inland away from the station.

The total of new birds trapped dropped 3817, or 28%, from that recorded in 1970, and with it most individual species totals also declined. Since some species total *increased*, however, some of the declines seem inordinately great. Table 2 shows the trapping totals for selected species for the past 3 years, and the inclusion of the 1969 figures tend to indicate that the 1-year declines for many species from 1970 may have been merely a normal variation for this station. The 1970 total of new birds trapped was a record for this station.

Some of the figures in Table 2 deserve special comment. The greatest numerical increase from 1970 to 1971 was shown by the Myrtle Warbler, and the Brown Creeper and Golden-crowned Kinglet also increased significantly. Since these three are all wintering birds of this area, it is interesting to note that other wintering birds were in smaller numbers than in 1970, specifically the Hermit Thrush, Ruby-crowned Kinglet, and White-throated Sparrow. In 1970 the station closed on 18 October and in 1971, on 24 October, both dates probably well before the height of the migration of many of the winter residents. It

would be interesting to speculate on the reasons why, for example, the first big flights of Myrtle Warblers and Brown Creepers were apparently later than those of Hermit Thrushes and White-throated Sparrows in 1970, but earlier in 1971. And for the first time on the station record, Golden-crowned Kinglets outnumbered the Ruby-crowned. Other increases of interest between the 1970 and 1971 species totals were noted for the Cape May and Blackpoll Warblers and the Indigo Bunting. Outstanding declines were recorded by the Traill's and Least Flycatchers, all the thrushes, the Red-eyed Vireo, and the Yellowthroat. For the first time in the station's 9-year history, Gray-cheeked Thrushes outnumbered Swainson's Thrushes.

TABLE 2. *Three-year totals of new birds trapped at Kiptopeke Beach for selected species.*

<i>Species</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
Yellow-bellied Flycatcher .....	20	29	17
Acadian Flycatcher .....	21	23	11
Traill's Flycatcher .....	61	120	27
Least Flycatcher .....	15	51	7
Red-breasted Nuthatch .....	78	0	6
Brown Creeper .....	81	15	130
Catbird .....	369	1088	585
Wood Thrush .....	14	53	12
Hermit Thrush .....	160	440	69
Swainson's Thrush .....	126	584	140
Gray-cheeked Thrush .....	109	517	218
Veery .....	277	1070	204
Golden-crowned Kinglet .....	228	53	195
Ruby-crowned Kinglet .....	327	221	181
Red-eyed Vireo .....	325	514	158
Nashville Warbler .....	29	28	17
Magnolia Warbler .....	207	270	158
Cape May Warbler .....	24	49	88
Black-throated Blue Warbler .....	652	569	369
Myrtle Warbler .....	1977	1576	3236
Chestnut-sided Warbler .....	17	14	3
Blackpoll Warbler .....	108	44	97
Palm Warbler .....	310	189	155
Ovenbird .....	268	290	196
Northern Waterthrush .....	112	95	59
Connecticut Warbler .....	29	19	16
Mourning Warbler .....	11	12	2
Yellowthroat .....	743	1546	435
Canada Warbler .....	27	26	8
American Redstart .....	1764	1607	1236
Indigo Bunting .....	81	47	78
White-throated Sparrow .....	163	405	80

Three unusual species were banded in 1971, all firsts for the station and all well photographed by the banders and assistants on hand. A Swainson's Warblers trapped on 12 September by F. R. Scott was carefully examined also by W. P. Smith and Henrietta Weidenfeld. This was apparently only the second record for the Virginia portion of the Eastern Shore, the first being 2 seen

on Tangier Island 17 to 19 September 1939 by Austin H. Clark (Clark, 1939). Both of these records may have been of migrants from the Pocomoke Swamp breeding population in eastern Maryland and southern Delaware, although there is ample evidence of some birds moving north after the breeding season. A Brewster's Warbler hybrid was banded on opening day, 4 September, by Walter Smith and was also seen by C. W. Hacker, Mr. and Mrs. Sydney Mitchell, F. R. Scott, and others. A male Black-headed Grosbeak, very thin with little fat, was trapped and banded on 16 October by Betty Lancaster and examined by M. A. Byrd, Dorothy L. Mitchell, Walter Smith, and others. This appears to be the third record of this species for Virginia (Peacock, 1961; Stone, 1972).

Peak flight days occurred on 14 and 15 September (369 and 371 birds, respectively), 22 September (771), and 7 and 8 October (850 and 529, respectively). After this, increasing numbers of Myrtle Warblers, which often seemed to migrate with little relation to the movements of other species, obscured the picture. On 13 October, for example, 487 birds were trapped, but 410 of these (84% of the total) were Myrtles. It must be remembered that totals given here are those of birds trapped *and banded*. These totals are proportional not only to the number of birds moving through the station area; they are also highly dependent on the judgment of the station director, who must estimate the size of the flight expected and the number of nets he can work considering the competence and number of his assistants. Very occasionally, birds that are trapped have to be released unbanded. Thus, on 15 September an estimated 260 American Redstarts and 60 Yellowthroats were released unbanded, and on 15 October, with only 181 birds banded, an estimated 1000 Myrtle Warblers were freed without being banded. In these cases where only one or two species are released unbanded, comparisons of the species totals for a specific day must take these releases into account.

The operation of this station in 1971 was essentially similar to that of previous years. Up to 39 mist nets were used with only minor changes in net locations. Various studies begun in previous years were continued, including an age-ratio project sponsored by the Eastern Bird Banding Association. As in the past, one licensed bander was generally in charge of the station for a week at a time, although many of these were also on hand at other times. The licensed banders were Mrs. Herbert W. Church, Jr., C. W. Hacker, Mrs. Betty Lancaster, Mr. and Mrs. Sydney Mitchell, F. R. Scott, and Walter P. Smith.

### Acknowledgments

The banders are indebted to Mr. and Mrs. Thomas Ellis of Kiptopeke Beach for many courtesies extended during the period of station operation; to C. M. Cubbage, President of J. Howard Smith, Inc., for permission to use company property for part of the station; to Mitchell A. Byrd for the use of much equipment and for aid in other ways; and to the 91 other banders and assistants without whose help the results of this project would be far less imposing. As in past years, Walter P. Smith edited all the banding field records and compiled the final tabulation.

### Literature Cited

Clark, Austin H.

1939. Notes from Tangier Island, Chesapeake Bay, Virginia. *Raven*, 10 (10-11): 1-2, October-November.

Peacock, Elizabeth D.

1961. Black-headed Grosbeak in Fairfax County, Virginia. *Raven*, 32: 3-4.

Scott, F. R.

1970. Banding results at Kiptopeke Beach during 1969. *Raven*, 41: 45-49.

1971. Kiptopeke Beach, Northampton Co., Va. In *Atlantic Flyway Review* (Region V). *EBBA News*, 34: 246-249.

Stone, Connie

1972. Black-headed Grosbeak at Radford. *Raven*, 43: 45.

115 Kennondale Lane, Richmond, Virginia 23226

## BLACK-HEADED GROSBEAK AT RADFORD

CONNIE STONE

The end of January 1971 brought a heavy ice storm to southwestern Virginia and many hungry birds to the feeders. Our most exciting visitor in Radford was a male Black-headed Grosbeak, *Pheucticus melanocephalus* (Swainson).

Joyce Simpkins, one of our New River Valley Bird Club members, first saw the bird on 31 January. The next day she called me. Armed with a dandelion stick to prevent slipping on the ice, I trudged over to her home. Sure enough, there on a feeder not 20 feet from a picture window was what had to be a grosbeak. No one could mistake the heavy, pale bill. All of his features checked with the characteristics of the Black-headed Grosbeak: black head, black and white wings and tail, tawny collar and breast, and yellow belly.

On 3 February he first visited my feeders. After that he stayed in the neighborhood where he was observed by many people, among them John W. Murray of Blacksburg.

Easter Sunday, 11 April 1971, was a beautiful day. The bird ate sunflower seeds which had spilled down our back steps, a vivid picture in the bright sunshine. This was the last record of our winter visitor.

101 West Eighth Street, Radford, Virginia 24141

## PEREGRINATIONS OF A GOLDEN EAGLE

RUTH S. SNYDER

Among "tourist attractions" of the Shenandoah Valley, at least to bird lovers, may be included a Golden Eagle with a history. Since spring 1972 the mounted bird has finally found a home in the Activities Building of Woodrow Wilson Rehabilitation Center, near Fishersville. There it perches in a "nest" of grass, twigs, and leaves in a large glass case. A painted background scene about 7 feet square in the corner behind the gray papier-mache "rock" on which the case rests depicts a typical scene of the eagle's habitat, with rocks, trees, a pond, and distant mountains.

The habitat arrangement, done by Shirley Massie of Stuarts Draft, is a great improvement for the eagle, which first perched among the school's basketball and other sports trophies and then sat in the unadorned glass case beside a busy corridor.

The Golden Eagle story began on 28 December 1968, when John Nuckolls, a rural mail carrier, found the bird dead beside a road in Stuarts Draft, apparently shot and killed days earlier.

Mr. Nuckolls reported his find to Franklin Taylor, a wildlife manager with the U. S. Forest Service. Mr. Taylor identified it as a Golden Eagle, placed a

wildlife checking tag on it, and urged Mr. Nuckolls to have it preserved. The next day it was taken to Freed's Taxidermy Shop in Waynesboro. It was mounted in a perching position and, though an immature bird and not in the best condition, the result was truly regal and awe-inspiring. An unrecognized cloud on the horizon was the mention by Norman Cole, state game warden, to Mr. Taylor concerning the federal law prohibiting possession of eagles.

Publicity began on 13 February 1969 with an article in *The Waynesboro News-Virginian* by outdoor writer Garvey Winegar, followed by an article that spring in *Virginia Wildlife*, which prompted federal investigation.

On 13 May, Robert Bain, Federal Game Management Agent for Virginia, called on Mr. Nuckolls and demanded that he surrender the eagle or face court action. According to regulations, he said, the eagle would have to be sent to the U. S. Department of the Interior regional office in Atlanta. Mr. Nuckolls, who had paid \$35 to have the bird stuffed, wanted the eagle to remain in the area to be used for wildlife and conservation talks and exhibits. He had already shown it at the Stuarts Draft Moose Lodge and at the local elementary school. He refused to surrender the eagle and later had it displayed at the Sherando Lake Recreation Area for the admiration of summer visitors and campers.

Mr. Bain appeared one day at Sherando and confiscated the eagle, taking it with him to his office in Richmond. There it stayed, except for some trips in his car to be shown to school groups.

Then, according to Mrs. Nuckolls, someone "wrote a letter to Washington" which got the attention of Congressman John O. Marsh. Finally, Walter E. Price, who took over on Mr. Bain's retirement in January 1970, decided to loan the eagle to the Rehabilitation Center, since it was the nearest federal institution to the scene of the eagle's last live appearance. Mr. Price has a letter of thanks from Rep. Marsh thanking him for the transfer of the eagle to Fishersville.

Such was the publicity at the time of the controversy that many people still mention proudly that once a Golden Eagle flew over the Waynesboro area. Hopefully, few would dare or care to shoot another one.

1245 Chatham Road, Waynesboro, Virginia 22980

## VSO SKYLAND TRIP—1972

C. W. HACKER

The annual Blue Ridge field trip was held at Skyland a week earlier than the customary time, 9-11 June 1972. The combination of the early date, a late growing season, and a cold front resulted in an unusual week-end outing. Only a few florets of the mountain laurel had opened, but the azalea was in full blossom. Most of us were unaware that this is a common, large-size shrub along the Skyline Drive.

At the Friday evening get-together, it was apparent that some cold, windy weather had moved in. Between then and breakfast on the following morning the field trip plan hurriedly was realigned to one of the leeward trails. After a hearty breakfast it was a motley lot that assembled at the parking lot. Everyone had donned all of the clothing in his possession, even a pair of mittens. Only two persons had to forego the hike due to lack of adequate clothing.

The substitute trip started from the Dark Hollow trail parking lot, noticeably free of sightseers' cars. After a few yards it was obvious that a good choice had

been made. There was wind only in the very tops of the taller trees and the birds were merrily singing. Mitchell Byrd had no sooner called for a Blackburnian Warbler than one appeared at a 12-foot height singing in clear sight of everyone in the party. Moments later a Scarlet Tanager also showed at a low level. Farther down, past the copper mine, Dr. Byrd called for a Solitary Vireo, and not one, but two, darted about obligingly. The steep climb up the Rose River was broken by the lunch stop at the falls where everyone conjectured as to the distance up to the Drive.

Arriving at Fisher's Gap, a cross-over was made to the Appalachian Trail, and the group continued on through the hemlock area to the Swamp Nature Trail of Big Meadows. This is an area which has been bypassed on former field trips because it didn't fit into the circuit selected. Fortunately, this year improvisations were necessary to accommodate the weather. In the swamp area the wildflowers appeared in profusion and provided a worthwhile diversion with the usual discussion as to the proper identification. By midafternoon the starting point had been reached, and everyone drove to the Big Meadow Wayside for refreshments and a look at the Vesper Sparrows and a great number of Brown-headed Cowbirds.

Saturday night the party was entertained with an interesting slide show of mountain wildflowers by Mr. and Mrs. Ellington of Salem, who also provided identifications along the day's trail.

Sunday morning opened clear, windy, and cold—that is, 36°—and auto glass had a heavy coating of frost. Again, a change in plans became a paramount issue. The original plan for a walk up the windy side of Hawksbill was scrapped in favor of the more protected falls trail at the South River Picnic area. Since this affected only two parties which would be departing for northerly areas, it appeared to be the more prudent action. The hike down the hollow of South River and return via the fire road proved to be one which well could be repeated. The trail has good bird life, is reasonably rugged, and can be traversed in 3 hours. The highlight of the day was the Yellow-throated Vireo and good sightings of the Hooded Warbler. The day ended with a leisurely lunch back at the picnic area.

The total species count came to 49, which could have been somewhat better if the wind had not kept us from the higher elevations. The count of individuals seen was frightfully low for all species other than the cowbird. All in all, though, the trip could be considered a pleasant one. Even with the wind and low temperatures conditions were better than that of only 10 days hence when over 12 inches of rain was recorded at Big Meadows.

300 York Warwick Drive, Yorktown, Virginia 23490

### LOCAL CHAPTERS OF THE VSO

This list of local chapters, compiled by Myriam P. Moore, Chairman of the Local Chapters Committee, was revised to February 1972. The number in parentheses after the chapter name is the approximate total number of members of that chapter.

1. Augusta Bird Club (80), 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 (14), Wise

6. Hampton Roads Bird Club (104), Newport News-Hampton
7. Lynchburg Bird Club (215), Lynchburg
8. New River Valley Bird Club (12), Blacksburg-Radford
9. Northern Virginia Chapter (125), Arlington-Fairfax
10. Piedmont Chapter (40), Gordonsville
11. Richmond Natural History Society (100), Richmond
12. Roanoke Valley Bird Club (110), Roanoke-Salem
13. Rockbridge Bird Club (20), Lexington
14. Spring Creek Bird Club (25), Darlington Heights

## NEWS AND NOTES

COMPILED BY F. R. SCOTT

**GAME COMMISSION ELECTS NEW CHAIRMAN.** The Virginia Commission of Game and Inland Fisheries recently elected Edward E. Edgar of Norfolk to be its Chairman, replacing retiring Chairman E. Floyd Yates of Powhatan, who had held the office since July 1971. Like Mr. Yates, Mr. Edgar is a Director of the Virginia Wildlife Federation and is well known among sportsmen in the Hampton Roads area.

**WHITE PELICAN AT CHINCOTEAGUE.** A White Pelican which appeared at Chincoteague National Wildlife Refuge was first reported by Ralph Keel on 30 August 1971, according to Refuge Manager J. C. Appel, and was seen the next day by Robert J. Watson. The bird remained all fall and winter and was observed by countless birdwatchers, including Jackson M. Abbott, A. E. Conway, Paul G. DuMont, C. F. Hills, P. W. Sykes, and C. R. Vaughn. During the winter it often associated with Whistling Swans, making itself considerably less conspicuous than would otherwise have been the case. The last observation of this bird was on 9 April 1972 (Vaughn).

**GROUSE NEST ON PIEDMONT.** On 30 April 1972 Charles E. Stevens found a Ruffed Grouse nest with 12 eggs near Tapps Ford, in the Piedmont portion of Rappahannock County, Virginia.

**LATE TRANSIENTS REPORTED.** There were a number of reports of late migrants during the fall of 1971 in Virginia. At Newport News Mrs. Dorothy L. Mitchell trapped and banded a White-eyed Vireo and a Solitary Vireo on 29 October, and 2 Parula Warblers were seen near Lewisetta, Northumberland County, on 31 October (F. R. Scott). A very late male Black-throated Green Warbler was carefully observed in Norfolk on 9 November by D. L. Hughes and Mrs. Edith V. Hughes, and a Blackpoll Warbler was trapped in Richmond on 1 November (Scott).

**REDPOLLS IN VIRGINIA.** During the late winter and spring of 1972 there were several reports of Common Redpolls in Virginia, a bird formerly considered very rare in the state. At Vienna, 2 were reported by Harry Jones on 5 February, and T. Roger Stone observed a female at Chester, Chesterfield County, 5-8 February. A most remarkable report was a flock of 75 near Churchville, Augusta County, on 15 February, which was seen and photographed by YuLee Lerner and other members of the Augusta Bird Club. This observation was written up in the 20 February issue of the Staunton, Virginia, *News-Leader*. The last report was of a group of 5 near Gainesville, Prince William County, on 10 April 1972 (J. R. Kemper, *vide* J. W. Eike).



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

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# DDT AND ITS RELATIONSHIP TO BIRD REPRODUCTION

COMPILED BY ROBERT J. COE

*This report is adapted from a personal letter addressed to William D. Ruckelshaus, Administrator, Environmental Protection Agency, in May 1972. It was filed as an exception to the federal hearing examiner's report dated 25 April 1972 and was prepared by a committee of the Student Chapter of The Wildlife Society, Virginia Polytechnic Institute and State University.*

Considerable confusion as to the relationship of DDT to reproductive failure in birds exists. This confusion is the result of misleading reports by governmental agencies and fallacious presentations of facts by supposedly knowledgeable persons. The following discussion obtained through a synopsis of the pertinent research literature is presented to clarify this relationship.

Calcium in the form of calcium carbonate has been shown to be the major constituent of eggshells. A decrease in this mineral in the eggshell results in a reduction in the eggshell weight, thickness, and strength (Longcore *et al.*, 1971a; Simkiss, 1970). Feeding birds a diet containing DDE, the major metabolite of DDT that remains in the environment after DDT application, has been shown to cause a decrease in the percentage of calcium present in the shell (Bitman *et al.*, 1969; Longcore *et al.*, 1971a).

The mechanism by which chlorinated hydrocarbons cause shell thinning has been demonstrated. Chlordane causes synthesis of hepatic microsomal enzymes by the liver that bring about hydroxylation of the sex hormones estrogen, testosterone, and progesterone. Hydroxylation makes substances more soluble in water and leads to their removal by excretion (Hart and Fouts, 1965). This effect was demonstrated in birds for DDT, dieldrin, and polychlorinated biphenyls (Peakall, 1970b). The result is a lowered level of estrogen which in turn causes a reduced calcium concentration in the blood and leg bones of the bird, the main sources of calcium for eggshells (Peakall, 1970a). Reducing estrogen levels also increases the time from mating to the laying of the egg (Peakall, 1970b).

Probably a more important factor in the thinning of eggshells is the effect of DDE on the activity of carbonic anhydrase. Carbonic anhydrase activity has an obligatory role in eggshell formation (Bernstein *et al.*, 1968). The strength of the eggshell has been shown to vary with the activity of carbonic anhydrase as it acts as a catalyst for the formation of carbonate ions for the formation of calcium carbonate (Common, 1941; Gustowska and Mitchell, 1945). Injection of DDE or DDT within one day of egg laying in birds on a DDT-free diet, eliminating any possible effect that hepatic microsomal enzymes might have on calcium deposition, resulted in greatly reduced activity of carbonic anhydrase and reduction in calcium carbonate in the eggshells. This resulted in the production of eggshells thinner than normal (Bitman *et al.*, 1970; Peakall, 1970b).

Thinning of the eggshell in eggs laid by birds fed DDT or DDE has been demonstrated in cottontail quail, *Coturnix coturnix* (Bitman *et al.*, 1969), the American Kestrel, *Falco sparverius* (Porter and Wiemeyer, 1969; Wiemeyer and Porter, 1970), Mallards, *Anas platyrhynchos* (Heath *et al.*, 1969), and Black Ducks, *Anas rubripes* (Longcore *et al.*, 1971b). In the Black Duck study a diet containing 10 parts per million (ppm, by weight) dried weight of DDT

was utilized. This is equivalent to the 3 ppm DDT found in natural foods eaten by Black Ducks (Reichel and Addy, 1968; Woodwell *et al.*, 1967).

The presence of DDT throughout the United States has been amply demonstrated. Residues have been found in all samples taken in Brown Pelicans in Florida, South Carolina, and on the Pacific Coast (Blus, 1970; Lamont *et al.*, 1970), in all eagles taken from 25 states (Mulhern *et al.*, 1970), and from all Starlings taken from sample points purposely spread over the United States (Martin, 1969).

Furthermore, outside of the controlled situation, i.e., in the wild, the presence of DDT and DDE has been correlated with eggshell thinning in many birds of prey (Hickey and Anderson, 1968; Ratcliffe, 1967 and 1970). Specific studies have shown thinning of eggshells in relation to the presence of DDT and its metabolites in the Canadian Prairie Falcon, *Falco americanus* (Fyfe *et al.*, 1969), Double-crested Cormorant, *Phalacrocorax auritus*, and White Pelican, *Pelecanus erythrorhynchos* (Anderson *et al.*, 1969), and in the Brown Pelican, *Pelecanus occidentalis* (Blus *et al.*, 1971; Risebrough *et al.*, 1970). In the study of Brown Pelicans it was further shown that variability in weight, thinness, and thinness index of the eggshell was positively correlated with variations in the concentration of DDE (Blus *et al.*, 1971). Only a low concentration of DDE is needed to cause a large effect, but large concentrations can cause as much as 95% thinning, as in the Brown Pelican (Peakall, 1970a).

The result of thinning of the eggshell of birds has been reproductive failure. Reproductive failure occurred in all of the controlled studies previously cited (Bitman *et al.*, 1969; Heath *et al.*, 1969; Longcore, *et al.*, 1971b; Porter and Wiemeyer, 1969; Wiemeyer and Porter, 1970). In the wild, predatory and fish-eating birds have been experiencing population declines in conjunction with the presence of DDT (Kreitzer, 1971; Peakall, 1970a). Specific studies have found reproductive failure and population declines in the Bald Eagle, *Haliaeetus leucocephalus* (Krantz *et al.*, 1970), and the Brown Pelican (Blus, 1970; Keith *et al.*, 1970; Lamont *et al.*, 1970). Other studies indicate similar occurrences in other species.

The value of birds, especially the Bald Eagle, is beyond quantification economically, ecologically, or aesthetically. Due to the persistence of DDT in the environment, these birds, on whose population DDT has had such a deleterious effect, may be well on their way to extinction.

Whatever the short-term benefits that may be derived from allowing the continued use of DDT, the inevitable loss of the wildlife resource and the potential benefits that may be derived from it makes continued use of DDT an act of ecological negligence.

### Literature Cited

- Anderson, D. W., J. J. Hickey, R. W. Risebrough, D. F. Hughes, and R. E. Christensen  
1969. Significance of chlorinated hydrocarbon residues to breeding pelicans and cormorants. Canadian Field-Naturalist, 83: 91-112.
- Bernstein, R. S., T. Nevalainen, R. Schraer, and H. Schraer  
1968. Intracellular distribution and role of carbonic anhydrase in the avian (*Gallus domesticus*) shell gland mucosa. Biochimica et Biophysica Acta, 159: 367-376.

Bitman, J., H. C. Cecil, and G. F. Fries

1970. DDT-induced inhibition of avian shell gland, carbonic anhydrase: a mechanism for thin eggshells. *Science*, 168: 594-596.

Bitman, J., H. C. Cecil, S. J. Harris, and G. F. Fries

1969. DDT induces a decrease in eggshell calcium. *Nature*, 224: 44-46.

Blus, L. J.

1970. Measurement of Brown Pelican eggshells from Florida and South Carolina. *BioScience*, 20(15): 817-869.

Blus, L. J., R. G. Heath, C. D. Gish, A. A. Belisle, and R. M. Prouty

1971. Eggshell thinning in the Brown Pelican: implication of DDE. *BioScience*, 21(24): 1213-1215.

Common, R. H.

1941. The carbonic anhydrase activity of the hen's oviduct. *Journal of Agricultural Science*, 31: 412-414.

Fyfe, R. W., J. Cambell, B. Hayson, and K. Hodson

1969. Regional population declines and organochlorine insecticides in Canadian Prairie Falcons. *Canadian Field-Naturalist*, 83: 191-200.

Gustowska, M. S., and C. A. Mitchell

1945. Carbonic anhydrase in the calcification of the eggshell. *Poultry Science*, 24(2): 159-167.

Hart, L. G., and J. R. Fouts

1965. Studies of the possible mechanisms by which chlordane stimulates hepatic microsomal drug metabolism in the rat. *Biochemical Pharmacology*, 14(3): 263-272.

Heath, R. G., J. W. Spann, and J. F. Kreitzer

1969. Marked DDE impairment of Mallard reproduction in controlled studies. *Nature*, 224: 47-48.

Hickey, J. J., and D. W. Anderson

1968. Chlorinated hydrocarbons and eggshell changes in raptorial and fish-eating birds. *Science*, 162: 271-273.

Keith, J. O., L. A. Woods, Jr., and E. G. Hunt

1970. Reproductive failure in Brown Pelicans on the Pacific Coast. *Transactions of the 35th North American Wildlife and Natural Resources Conference*, pp. 56-63.

Krantz, W. C., B. M. Mulhern, G. E. Bagley, A. Sprunt, IV, F. J. Ligas, and W. B. Robertson, Jr.

1970. Organochlorine and heavy metal residues in Bald Eagle eggs. *Pesticides Monitoring Journal*, 4(3): 136-140.

Kreitzer, J. F.

1971. Eggshell thickness in Mourning Dove populations. *Journal of Wildlife Management*, 35(3): 563-564.

Lamont, T. G., G. E. Bagley, and W. L. Reichel

1970. Residues of o,p'-DDD and o,p'-DDT in Brown Pelican eggs and Mallard Ducks. *Bulletin of Environmental Contamination and Toxicology*, 5: 231-236.

Longcore, J. R., F. B. Samson, J. F. Kreitzer, and J. W. Spann

- 1971a. Changes in mineral composition of eggshells from Black Ducks and Mallards fed DDE in the diet. *Bulletin of Environmental Contamination and Toxicology*, 6(4): 345-350.

Longcore, J. R., F. B. Samson, and T. W. Whittendale, Jr.

- 1971b. DDE thins eggshells and lowers reproductive success of Black Ducks. *Bulletin of Environment Contamination and Toxicology*, 6(6): 485-490.

Martin, W. E.

1969. Residues in fish, wildlife, and estuaries. *Pesticides Monitoring Journal*, 3(2): 102-114.

Mulhern, B. M., W. L. Reichel, L. N. Locke, T. G. Lamont, A. Belisle, E. Cromartie, G. E. Bagley, and R. M. Prouty

1970. Organoachlorine residues and autopsy data from Bald Eagles, 1966-1968. *Pesticides Monitoring Journal*, 4(3): 141-144.

Porter, R. D., and S. N. Wiemeyer

1969. Dieldrin and DDT: effects on Sparrow Hawk eggshells and reproduction. *Science*, 165: 199-200.

Peakall, D. B.

- 1970a. Pesticides and the reproduction of birds. *Scientific American*, 222: 72-78.  
1970b. p,p'-DDT: effect on calcium metabolism and concentration of estradiol in the blood. *Science*, 168: 592-594.

Ratcliffe, D. A.

1967. Decrease in eggshell weight in certain birds of prey. *Nature*, 215: 208-210.  
1970. Changes attributable to pesticides in egg breakage frequency and eggshell thickness in some British birds. *Journal of Applied Ecology*, 7: 67-107.

Reichel, W. L., and C. E. Addy

1968. A survey of chlorinated pesticide residues in Black Duck eggs. *Bulletin of Environmental Contamination and Toxicology*, 3: 174-179.

Risebrough, R. W., J. Davis, and D. W. Anderson

1970. Effects of various chlorinated hydrocarbons. *Oregon State University Environmental Health Science Series No. 1*, 1: 40-53.

Simkiss, K.

1970. Calcium in reproductive physiology. New York, Reinhold Publishing Co., p. 186.

Wiemeyer, S. N., and R. D. Porter

1970. DDE thins eggshells of captive American Kestrels. *Nature*, 227: 737-738.

Woodwell, G. M., C. G. Wurster, Jr., and P. A. Isaacson

1967. DDT residues in an East Coast estuary: a case of biological concentration of a persistent pesticide. *Science*, 156: 821-824.

Division of Forestry and Wildlife  
Virginia Polytechnic Institute and State University  
Blacksburg, Virginia 24061

## KIPTOPEKE IN THE SPRING—1972

WALTER POST SMITH

For the uninitiated, Kiptopeke lies at the southern extremity of that peninsula known as the Eastern Shore of Virginia. It is an area where there is an unbelievable concentration of southward migrating birds in autumn along the Atlantic flyway. A group of Virginia banders has run a banding station there in the fall for the last nine years and averaged something like 10,000 birds banded of 100 species in a period of six or seven weeks.

Now, I have always believed, personally, that Kiptopeke is "just slightly below Heaven," and even a slow day of bird banding is "pure pleasure." Having so readily exposed my bias, it may be more easily understood why I maintain that my first venture at sampling the spring migration at Kiptopeke left me, paradoxically, both frustrated and yet rewarded.

I went into this fully aware that my banding associates thought that I was wasting my time, but I felt deeply that the only way to be sure of the spring banding situation was to try it. I should emphasize at this point that my venture can hardly be considered a fair trial of spring banding, since it extended only from 6 May through 14 May 1972. Of those nine days, we were rained out on two and had strong winds in the northern sector on five; that left just two days with gentle winds in the southern sector which we deemed to be the most favorable for northward-migrating birds.

For those of you who are acquainted with our fall operation at Kiptopeke, I might say that this was a comparatively small operation, with 16 nets as opposed to 40 in the fall. Our staff was composed of myself as bander, my wife Doris, who is wonderful in the way she puts up with my selfish banding enthusiasm, and my friend, Jose Hernandez, without whose help at the station and daily provision of transportation I would not be writing this.

Our frustration stemmed from the often-predicted lack of birds during the spring migration. In the fall at Kiptopeke, anything less than 100 birds per day is considered "slow," several hundred per day is considered "good," and a "super day" runs up over 1000. Our spring operation resulted in just 149 birds netted of 27 species, with a low day of 12 and a high of 33 birds per day! This was certainly quantitatively disappointing, and yet there were definite compensations.

I sometimes think that, in the fall, we often miss the boat in that we are usually so busy that we lack the time to enjoy fully the birds we are handling. Our spring operation permitted us to examine each individual leisurely, photograph those bright plumages, and even record those seen and heard in the woods and passing overhead. Jose's voracious photographic appetite far exceeded my modest diet of birds and soon included such subjects as insects, flowers, fungi, reptiles, and some miscellaneous objects as yet unnamed.

Probably our biggest surprise resulted from the realization that about 10% of the birds we were handling were returns of birds banded during previous falls. This group consisted of 1 Yellow-shafted Flicker, 1 Hairy Woodpecker, 1 Carolina Wren, 3 White-eyed Vireos and 2 Prairie Warblers. We assume these to be locally breeding birds, with the Prairie Warblers and White-eyed Vireos, of course, also being migratory. Interestingly, 4 were banded in 1971, 3 in 1970, and 1 White-eyed Vireo was banded by Dr. M. A. Byrd in 1968!

The 8 individuals were netted 16 times during the week. I suspect that the proportion of returns in the spring is so much higher than that in the fall because the migratory local breeders have already left when we arrive on the scene in the fall.

Hawk observations were relatively scarce during the period, being limited to several Sharp-shinned, Broad-winged, and Red-tailed Hawks and the ever-present Ospreys, in search of, or returning with, food. We came no closer to netting one than the occasion when one of the Sharp-shins, up to its usual tricks, victimized a Yellowthroat.

One of the more interesting sidelights of our week occurred on the first day we were rained out. Jose and I were driving around in the rain exploring every little side road in the "boon docks." As we came to the end of Route 655, on the ocean side, Jose remarked, "Hey, there's an Osprey, nesting on the ground." I immediately argued that it probably wasn't a nest, since Ospreys around here just don't nest on the ground. So, while Jose was setting up his camera equipment, I continued to study the bird through my binoculars. She was on a grassy promontory about 200 yards away, about 20 feet from the waters edge and about 24 inches above the water level. The longer I looked the more I convinced myself she was nesting. Suddenly, down sailed the male Osprey with a fish in his talons and proceeded to feed her! This really excited us since we now had reason to believe that the female on the nest was incubating. With the thought that Dr. Mitchell Byrd would be interested in this occurrence in connection with his study on the Osprey's status in the Chesapeake Bay area, and that we might disturb the birds, we resisted the impulse for a much closer look.

Quite coincidentally, Dr. Byrd showed up that night at our motel for a few days surveillance of the Eastern Shore Ospreys, and we delightedly reported our "find." He knew the area and said he would check it out the next day. The next day, after closing the station for the evening, Jose and I drove down for another look at our Ospreys. Imagine our chagrin when we found that, due to strong northeast winds all day and a tide about 4 feet above normal, our promontory was under about 2 feet of water, and the nest had disappeared completely! We were also disappointed to find later in the week, when we again ran into Dr. Byrd, that he had been unable to check out our nest. But—there is a happy sequel to our little saga—after we had returned home and were projecting our photographic efforts for the week, we found that Jose had a series of slides showing the female Osprey on the nest and the male coming in to feed her. So, Jose had preserved for posterity a pictorial record of this unusual occurrence.

Another "bonus" for the week was observing migrating hummingbirds feeding on the Japanese honeysuckle right at the banding area. We saw only 1 female among the many males, and there were occasions when we had as many as 4 in view simultaneously. As a matter of fact, one little male blundered into a net and, in spite of the difficulty of holding legs that are hardly longer than  $\frac{1}{4}$  inch, I did get one good close-up of that beautiful, crimson gorget. The thrill for the week was a male Kentucky Warbler. It was, incidentally, the first one I had ever banded and was unbelievably beautiful.

Our weeks efforts yielded totals of 115 new birds banded of 27 species, with



16 returns and 18 repeats, for a total of 149 birds netted. The newly banded birds are listed in Table 1.

TABLE 1. *Birds newly banded at Kiptopeke 6-14 May 1972.*

<i>Species</i>	<i>No. Banded</i>	<i>Species</i>	<i>No. Banded</i>
Catbird .....	29	Gray-cheeked Thrush .....	1
Yellowthroat .....	24	Veery .....	1
Prairie Warbler .....	14	Starling .....	1
Indigo Bunting .....	10	White-eyed Vireo .....	1
Cardinal .....	7	Red-eyed Vireo .....	1
House Wren .....	5	Black-throated Blue Warbler .....	1
Barn Swallow .....	4	Blackpoll Warbler .....	1
Mockingbird .....	2	Pine Warbler .....	1
Rufous-sided Towhee .....	2	Kentucky Warbler .....	1
Bobwhite .....	1	American Redstart .....	1
Great Crested Flycatcher .....	1	Eastern Meadowlark .....	1
Blue Jay .....	1	Brown-headed Cowbird .....	1
Carolina Wren .....	1	White-throated Sparrow .....	1
Long-billed Marsh Wren .....	1		

In retrospect, it was a week of fun and disappointments, and we did learn some new things. But I found myself left with the following unanswered questions:

Whatever happened to all those Myrtle Warblers I was sure I would band? On several days they were numerous in the trees around our motel (located about 5 miles north of the station); yet I saw and heard only one all week in the station woods!

Was there any real significance in banding 4 Barn Swallows, while in nine previous years of fall banding at Kiptopeke we had only two single banding incidences?

Why didn't we band, or recover, more of the permanent residents such as Carolina Chickadees, Tufted Titmice, and Pine Warblers, which we band rather commonly in the fall? I have a very distinct feeling that the ratio of birds in the nets to birds in the woods is much lower in the spring than in the fall.

The meadowlark was a banding "first" for Kiptopeke. Now that I think of it, I never remember hearing or seeing one there in the fall; yet they were common in the station area in spring. As permanent residents, what gives? Do they breed in one local area and winter in another?

And finally, how many, if any, of the birds we banded this spring will show up during our fall operation?

## PAINTED BUNTINGS AT CLIFTON

JAMES W. EIKE

On the morning of 6 May 1972 at 9:10 a.m. Claire L. Eike observed what clearly appears to have been a pair of Painted Buntings, *Passerina ciris* (Linnaeus), in our front yard near Clifton, Fairfax County, Virginia. Using 8x binoculars at about 75 feet, she watched them for 5 minutes. First to appear was a warbler-sized, almost saffron-yellow bird with a finch-like beak feeding on the ground. This was soon joined by another bird with a startling red underbody and vivid red rump. Unfortunately, she noted only that the head and upper back were "dark." She checked size, colors, bill, etc. against two field guides at the time and was confident of her identification.

The birds fed on the ground, then up in dogwood trees, leaving just before I got home. For a week thereafter I frequently heard a song which could well have been that of the Painted Bunting but could not catch up with the singer. We learned later that one had been identified in Kensington, Maryland, some days earlier (*American Birds*, 26: 747, 1972).

6207 Newman Road, Fairfax, Virginia 22030

## VSO EASTERN SHORE FIELD TRIP—1972

AUSTIN R. LAWRENCE

The weatherman and myriad birds all cooperated to provide a fine week end for the 35 VSO members who came to Wachapreague on 18 August 1972. On Saturday morning, after the last breakfast clam fritter had been disposed of, the sturdy barge that was the transport for the day embarked on the waters of the area. Among the strongest impressions were those made by the huge flocks of Black Skimmers and the variety of gulls, terns, sandpipers, and herons found on or near Cedar Island. There were excellent numbers of oystercatchers, Black-bellied and Semipalmated Plovers, and Whimbrels, and the Club Point heronry mosquitoes were also most impressive. A Red-breasted Merganser and 3 Common Scoters were unusual August records.

The heronry was in its usual mid August shape. No eggs were found in the colony, but there were still many very young Louisiana and Little Blue Herons in nests. In addition, there were the usual swarms of older but still nonflying young of both species in the heronry, as well as a few young Common Egrets and 1 Black-crowned Night Heron, the latter two species being unusually late in their nesting endeavors. All the other herons and ibis had apparently completed nesting and left the colony. Regrettably, Dawson Shoals, the recently created island in the inlet which has been so productive of nesting terns in recent years, had nearly disappeared beneath the waves.

Social highlights included most pleasant sessions on the Wachapreague Hotel porch, where fresh clams were liberally dispensed, old friendships renewed, and new ones made. Those fresh clams also appeared on the barge off Club Point, where the aficionados adjudged them to be of top quality. Later Saturday night, many of us watched the amazing performance of about 25 Black Skimmers feeding in the moonless night over the waters of the hotel marina and the nearby creek.

Those who made the Sunday drive to Chincoteague were rewarded by further good birding which provided a few additional species including 2 out-of-season Red-throated Loons and another Red-breasted Merganser. For the very few remaining at Chincoteague on Monday morning, three people as far as we know, an extra bonus was a Virginia Rail with 4 chicks that fed for half an hour in full view at close range. Altogether, the highly successful trip resulted in an unofficial count of 70 species.

3301 Patrick Henry Drive, Falls Church, Virginia 22044

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## NEWS AND NOTES

COMPILED BY F. R. SCOTT

**PHELPS NAMED AWARD RECIPIENT.** Chester F. Phelps, Executive Director of the Virginia Commission of Game and Inland Fisheries, was presented with the 1971 Charles Banks Belt Award "for the greatest contribution to waterfowl restoration in the Atlantic Flyway" at a meeting of the Atlantic Flyway Council at Sanibel Island, Florida, on 1 August 1972.

With the award there was presented a parchment scroll inscribed, "To the State of Virginia, Commission of Game and Inland Fisheries, in recognition of outstanding work of Chester F. Phelps, Executive Director, who displayed the foresight and leadership necessary to carry out a widely influential program for the preservation of the natural resources of the coastal zone which has greatly benefitted the migratory waterfowl and all the natural resources of the Atlantic Flyway." Phelps received an inscribed bronze medallion.

The Charles Banks Belt Award, named for one of the founders and first Chairman of the Atlantic Flyway Council, now has been presented eight times since its establishment in 1954. This year's recipient also was one of the founders of the Council. He has been active in it ever since and has served as its Chairman as well as holding other offices and committee assignments.

**ICELAND GULL AT LYNNHAVEN.** A second-year immature Iceland Gull, first noted at Lynnhaven Inlet, Virginia Beach, Virginia, on 31 December 1971 by P. W. Sykes, Jr., and R. J. Tripician, remained in the area for at least two months and was seen by many observers, including Henry Bielstein, M. A. Byrd, G. S. Grant, D. L. Hughes, and Bill Williams. It was last noted near here on 11 March 1972 by C. R. Blem and D. W. Sonneborn. One seen at Craney Island, Chesapeake, on 30 January may have been the same bird (Hughes *et al.*).

**RING-BILLED GULL CONCENTRATION.** On 7 March 1972 James W. Eike observed a huge flight of Ring-billed Gulls over his home near Clifton, Fairfax County, Virginia. He estimated 10,000 to 12,000 birds were in the flight, which was flying eastward apparently from a sanitary landfill near Centreville to the Potomac River. This is probably a record concentration for inland Virginia.

**LITTLE GULL ON ELIZABETH RIVER.** A Little Gull in adult winter plumage was found on the Elizabeth River between Norfolk and Portsmouth, Virginia, on the 11 and 13 February 1972 by Gilbert S. Grant. Several recognizable color slides were obtained. Presumably the same bird was seen twice again, once here on 18 February by R. L. Ake and the last time about 5 miles away on the Southern Branch of the Elizabeth River in Chesapeake on 27 February (Grant). In all cases the bird was with large flocks of Bonaparte's Gulls.

**BARN OWLS KILLED BY AUTOS.** Three dead Barn Owls, apparently killed by automobiles, were picked up beside the road (part of the Chesapeake Bay Bridge-Tunnel) on Fisherman Island, Northampton County, Virginia, on 27 December 1972 by Mrs. Ruth A. Beck and other participants in the Cape Charles Christmas bird count.

**WOOD THRUSH IN WINTER.** David W. Sonneborn observed a Wood Thrush at Richmond, Virginia, on 20 February 1972, the first winter record for this area. There are probably only four or five other winter records for the state.

## INDEX TO VOLUME 43—1972

This index contains all but the most casual references to bird species (A.O.U. approved English names only) in the narrative text. It does not, however, include references to the tabulations in the Christmas bird counts (pp. 6-10) or those for the Kiptopeke banding operations (pp. 43 and 57).

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