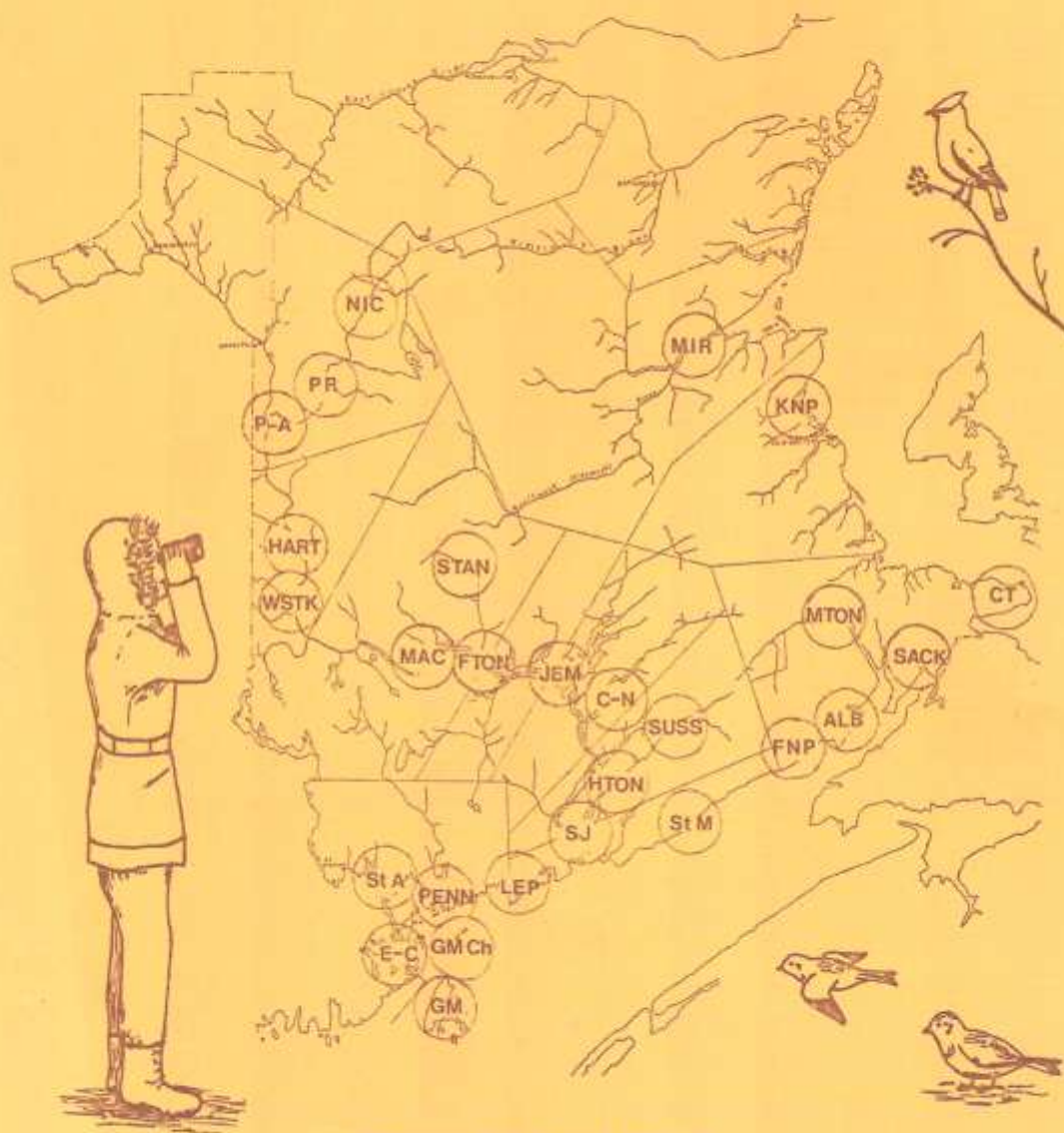




N.B. Naturalist

7(1) February 1976



Christmas Bird Counts 1975-76

N. B. FEDERATION OF NATURALISTS / FEDERATION DES NATURALISTES DU N.-B.

277 Douglas Avenue, Saint John, N. B., Canada E2K 1E5 Tel. 693-1196

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- develop an understanding interest in nature among amateur naturalists
- serve as a means of communication and cooperation among nature-oriented groups and individuals
- promote ecologically sound policies and programs of resource management
- foster public awareness of the relationships between man and nature.

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Advice to Contributors

Preferred articles are those from one-half to two pages in length, having relevance to the natural history of New Brunswick. Authors of potentially longer articles are invited to contact the editors. Drawings and cover illustrations should be in black ink and in the same size and proportions they would occupy in the N.B. Naturalist. Observations for "Nature News" should be submitted promptly after March 15, May 31, August 15 and November 15, or more frequently.

Aux Naturalistes Francophones

Nous avons besoin d'articles en français, aussi de volontaires qui voudraient écrire des résumés en français des articles en anglais.

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Correspondence

Re the N.B. Naturalist to D. S. Christie, 277 Douglas Ave., Saint John, N.B. E2K 1E5. Articles and reports are always welcome.

Re federation policies, programs, and Newsletter information to K.H. Deichmann, P.O. Box 73, Alma, N.B. E0A 1B0.

1975-76 Christmas Bird Counts

David Christie

For the fourth year in a row 27 Christmas Bird Counts were conducted in New Brunswick. The 374 participants reported 59,115 birds of 106 species, three more than last year but seven fewer than the record 113 species counted in very mild 1973. Weather conditions leading up to the counts were near average, neither extremely cold or mild. Evergreen cones were scarce, in marked contrast to the bumper crop a year ago. Most other fruits and seeds were also in relatively poor supply, but those conditions seem not to have had much affect on populations early in the winter, except for Red-breasted Nuthatches and possibly Golden-crowned Kinglets.

The four most unusual species reported were a Golden Eagle at Riverside-Albert, an Ivory Gull at Cape Tormentine, a Varied Thrush at Hammond River-Hampton and two male Gadwalls at Saint John. A Red-shouldered Hawk at Jemseg was very unusual for winter but it was not seen entirely satisfactorily. Less unusual than those but reported for the first time on our Christmas Counts were American Wigeon and Field Sparrow.

The number of summer birds lingering into winter was not particularly great. Most noteworthy were the total of 50 Mourning Doves and the 21 Yellow-rumped (Myrtle) Warblers at Cape Tormentine, the second year that that surprising number has been found in the wintering area along Northumberland Strait.

Among water birds none of the regular species were particularly scarce, but the rare Black-headed Gull was not recorded. Black Duck, Bufflehead, Common Merganser and Iceland Gull were found in larger numbers than usual. Three King Eider were seen at St. Andrews. Miramichi had few water birds because shutdowns of major industries allowed the river to freeze completely there this winter.

Birds of prey mostly were found in average numbers, although there was a record 5 Sharp-shinned Hawks on one count (Hammond River-Hampton) and a pleasing total of 19 Bald Eagles on six counts, with four more areas reporting the species during count period. Barred Owls were noted on more counts than usual.

Ruffed Grouse were found in good numbers and Ring-necked Pheasants in very low numbers, as they were last year. Although formerly found every year, Gray Partridge have not been reported on our counts since 1968. The Downy Woodpecker was found in about average numbers but the Hairy was more plentiful than usual on this year's counts. Gray Jay and Common Crow were a bit less common but Blue Jays were somewhat above normal and Common Ravens were seen in near normal numbers this year. Interestingly, however, high numbers of Crows were reported at Perth-Andover, Plaster Rock and Kouchibouguac.

Among the smaller forest birds, a good number of Black-capped Chickadees were present while Boreal Chickadees were found in about average numbers. Brown Creepers were less than normally common as were both nuthatches, especially the Red-breasted of which the very low population contrasts greatly with the record numbers present a year ago. Golden-crowned Kinglets were similarly depressed from the large numbers last year. The few seen were found only on the row of counts from Lepreau to Cape Tormentine.

Bohemian Waxwings were recorded in somewhat larger numbers than they have been in previous years. It is interesting to note that the western species, once very irregular in New Brunswick has been reported on Christmas Counts in eight of

the last 13 years and is now reported at some time during virtually every winter. Northern Shrikes were found in good numbers for the second year in a row. Starlings were a bit scarcer than usual but House Sparrows have shown little change for the last five years.

Among blackbirds, it was a low year for Brown-headed Cowbirds but about average or a bit better for Red-winged Blackbirds and Common Grackles. Blackbirds seem to do fairly well in northern N.B., being well represented on the Nicau-Riley Brook, Plaster Rock and Miramichi counts. Northern (Baltimore) Orioles have not been recorded on a count since 1969, though they were seen six out of nine years during 1961 to 1969.

Cardinals, now found three years in a row, may be becoming established as regular, but rare, winter residents. Another southern species, the Mockingbird, continues to be reported almost annually (since 1965) on the counts but has not increased its numbers.

The Pine Grosbeak and Common Redpoll were the predominant winter finches on the counts, although with poor supplies of natural foods both were decreasing by the beginning of January. Apparently they were moving farther south. Evening Grosbeaks and Pine Siskins were found in average numbers, as were Purple Finches, but average means "very few" in the case of the latter species. American Goldfinches were scarce. A few White-winged and Red Crossbills were found near the Fundy coast.

Dark-eyed (Slate-coloured) Juncos and Tree Sparrows were found more numerous than they have been for several years, although juncos were still not as common as they had been on the counts during 1961-68. White-throated Sparrows were in good numbers, exceeded only by the counts of 1973. Other sparrows were all found in about normal numbers.

No matter how one looks at it the number of Snow Buntings was exceptional this year. Firstly a record 1600 (1500 in one flock) were found at Moncton. Secondly, only two of the smaller counts (Stanley and Pennfield) did not find them. Thirdly, even if one ignored Moncton the remaining counts' average per party-hour is as high as it was in 1966, the best previous year. The two other typical open country birds are Horned Lark which was found in good numbers although on only four counts in eastern N.B. and Lapland Longspur which was seen in its usual low numbers.

In a poll of Christmas Bird Count compilers this winter everyone that replied, and most did, favoured listing the results of the count in the form of a table. Therefore, the old form of listing the results is abandoned. All the data except some of the environmental conditions and the names of the participants are listed in a table. This gives, I think, an equal opportunity to view the results of a particular count or a particular species. Thus one can readily note such patterns as, for instance, the occurrence of White-breasted Nuthatches almost exclusively on the Saint John valley counts.

New Brunswick Christmas Bird Counts, Dec. 30, 1975 - Jan. 4, 1976

Grand Manan Channel (GMCh)

Dec. 23. Cloudy, good visibility; some "white caps". P. A. Pearce

Grand Manan (GM)

Dec. 27. Some fog a.m., drizzle p.m.; scattered patches of snow; freshwater frozen. P. A. Pearce (compiler).

Eastport-Campobello (E-C)

Jan. 2. Clear; 0-10 cm snow cover; all fresh, some salt water frozen. Arlo Bates, Dale Calder, Doris Calder, Kathryn Calder, Charles Dorchester, Mary Dorchester, Mark Forsyth, Ellen Johnson, Betty Lank, Calvin Malloch, Sheila Malloch, Kerry Newman,

	G M C N	G E M C	S E A N	P E N P	S L E P	S J M P	S F N P	A L B K	M T O N	C K N P	S H T O N	J E M	F M A C	S W S T K	H A R T	P P A R C	N I	TOTAL
Common Loon	2 12	5 6 9				1 2 1 3												34
Red-throated Loon																		10
Red-necked Grebe	1 25	5 2																33
Horned Grebe	2 26	1 5 30																64
Pied-bill Grebe																		*
Great Cormorant	2 44	5 9 6 8																70
Great Blue Heron																		1
Canada Goose	5					2 1	*											355
Mallard #	* 3	1 1 5																64
Black Duck #	6 25	83 56 42 311	19 51															2090
Gadwall ##																		2
Pintail																		4
Green-winged Teal #																		3
American Wigeon ##																		1
Greater Scaup	10 4 67					2												83
Common Goldeneye	68 148	17 5 92 225	12															665
Barrow's Goldeneye	4					2												6
Bufflehead #	* 470	61 20 63 55																689
Oldsquaw	1 423	23 95 36 3																866
Common Eider	71 16	98 12 90 3																444
King Elder																		3
White-winged Scoter	27 11	21 100 1																160
Surf Scoter																		153
Black Scoter	* 12					1												17
Common Merganser	* 7	3 50 40																367
Red-breasted Merganser	27 61	2 5 16 27																104
Goshawk																		6

[illegible]

	G	G E- M C A	S E- C A	P E N N P	L E P	S J M P	S E C J M P	F N S E C	A L C B B	S A C B K	M T O N	C T	K N P	M I R	S U S	H C T O N	J F M E T O N	S W H T S A R K	R P I A R C	N	TOTAL
Mourning Dove #		30	15			2	2	*	*	1								*			50
Great Horned Owl #						*	*	*	*	*										38	4
Snowy Owl						*	*	*	*	*											5
Barred Owl						[]	[]	[]	[]	[]											4
Short-eared Owl																					*
Pileated Woodpecker #					2					4											11
Hairy Woodpecker	*	2	7		6	10	4	5	7	10	2			4		10	13	15	5	6	15
Downy Woodpecker	*		4			20	18	5	2	11	10		3		17	7	16	15	3	8	16
Blk-backed 3-toed Wdpr.						3															5
Horned Lark #	*									14	57	25	[]								97
Gray Jay #			4	1	9	2	2	12	12	5	8	11	4		2	5	11		2	11	143
Blue Jay	16	30	49	6	5	80	13	31	40	44	92	95	9	93	18	120	92	34	89	17	1444
Common Raven #	8	27	40	1	116	24	6	16	40	74	87	56	11	93	225	37	51	3	64	71	1591
Common Crow	47	164	84	79	126	171	2	12	8	41	53	46	19	5	10	17	8	4	20	9	1232
Black-capped Chickadee	10	57	121	9	33	279	85	71	59	65	109	156	1	67	12	139	134	1	100	35	1922
Boreal Chickadee	*	*	1	2	17	12	51	21	23	11	74	6	19		28	3	3	2	5	2	299
White-breasted Nuthatch			*	*		3		*											[]	2	14
Red-breasted Nuthatch	*	*	*	*		5	2	*	1				3		2	1	2			1	19
Brown Creeper					1		1	2		2			2			1					10
Mockingbird									*	*			[]								1
American Robin	*	1	8	2		1	*	11	4	1	1		1				2		2	36	36
Varied Thrush																					1
Golden-crowned Kinglet			3	10	6	3	7	5			1										37
Ruby-crowned Kinglet														[]							1
Bohemian Waxwing #			*			44		*	*	45			[]				2				93
Cedar Waxwing		2			2				*	4	3	2			*	2	*				*
Northern Shrike		2	2			3			4	3	2				*	2				1	29

	G M C A	G E C A	S E C A	P E C A	S E P	S E P	S E P	S E P	A S P	C K M	S H C	T F M	S W H	P P N	TOTAL
Loggerhead Shrike x															
Starling	63 43	130 70 105	103 30 12	121 378 440	58 22 78	5	101 5	10	123 6	18 44	5603	1			
Myrtle Warbler															
House Sparrow	53 117	107 1 43	479 20 32	198 569 103	11 177 654	245 301 177	162 75	3	654 34	80 389 224	7177				
Red-winged Blackbird	9	*	4 3												
Rusty Blackbird			2 *	*	3										
Common Grackle	13 20	5 1 3	10 1 1	3 2 5	3	1			*	3	73				
Brown-headed Cowbird	34 17	* 3	5 14	7 2 6	4	2			*	3	108				
Cardinal	11		2			3					6				
Dickcissel	2		*								2				
Evening Grosbeak	3 21	22 9 10 133		8 14 152 8	1	24 0			58 20	13	572				
Purple Finch		*			1	2			10	5	20				
Pine Grosbeak	15 *	6 2 23 2 9	15 4 58	142 5 137		43 40	132 72 31	114 44 15	1 9 2		246				
Common Redpoll	* 25	19 24	2	85 369 371	223 56 107	13 80	146 129 31	29 44	7 15		1810				
Pine Siskin		5 31 3		1 25			74	1	*		140				
American Goldfinch	3 2 2		1 6 1 5 11			8 *	15 5 *				59				
Red Crossbill			12								20				
White-winged Crossbill	*	20 5	4	*	204 2						55				
Rufous-sided Towhee	11										1				
Savannah Sparrow x											1				
Slate-coloured Junco	* 7	* 2	111 2 77	12 31 16	12	50 9	* 40 1	1 3			404				
Treo Sparrow	3 68	24 9 19 65 5 17		7 37 15	16	130 72	178 76 11	41 19			855				
Chipping Sparrow x		1									1				
Field Sparrow ###											1				
White-throated Sparrow	1 2 10	10 47 *	9	12 1	2	7	12				117				
Fox Sparrow			4	*			*				5				
Swamp Sparrow #							2				2				

G	M	C	E	S	P	L	S	F	A	S	C	K	M	S	H	C	T	F	M	S	W	H	P	A	R	C	TOTAL
3	3	5					3	3	2	2	5							1	2	*						33	
12	20	25	138	15	25	24	74	471	150			448	21	105	30	39	152	212	58	5			42	150	14	9	4047
5	38	748	1447	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	1355	496
5	34	56	43	37	57	62	24	36	48	46	43	47	12	29	11	34	15	22	35	23	7	22	19	16	21	22	106
19	2	7	2				5	4	5	2	1															5	
23	27	2	29	30	2	27	29	20	1	23	21	20	30	20	30	3	3	20	26	29	28	29	27	2	29	4	(20-4)
1430	710	900	910	910	200	740	910	710	760	795	600	734	830	745	800	785	900	1010	800	900	910	910	910	900	910	910	200
1545	1715	1700	1430	1700	1700	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1430	1715
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	230
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	146
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	132
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	600
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	255
7	21	15	9	12	4	3	11	14	19	29	24	16	20	2	19	11	19	25	15	5	11						342
15	71	195	121	51	181	131	24	111	101	201	132	238	231	201	22	204	11	178	227	20	76	150	10	55	72	64	372
15	2	3	7	6	8	1	1	6	52	15	40	30	39	13	11	2	9	6	12	10	1	7	10	1	5	12	20
69	192	114	45	175	114	20	166	170	161	204	199	220	192	20	117	105	173	215	180	76	143						3382
-5	+6	-7	-13	-19	-6	+7	-12	-24	-5	-2	-19	-25	-20	-27	-10	-10	-12	-27	-10	-15	-5	-20	-1	-9	-14	-10	(+9 to -27)
	+3	-1	-2	-3	-2	-2	-10	-1	0	-11	-11	-12	-16		-4	-1	-18	-4			0	-8	-7	-7			
NW	SW	NW	?	NW	SW	?	NW	SE	SE	SE	?	NW	W	?	?	SE	NW	NW	?	N	N	N	N	N	N	N	?
20	15	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	6	8	14	7	15	18	9	10	6	16	15	14	5	3	2	3	5	12	19	3	2	11	4	6	3	4	

Song Sparrow
 Lapland Longspur
 Snow Bunting #
 Unidentified
 Total birds
 Total species
 Extra species, count period
 Date (Dec. 20-Jan. 4)
 Time (Start & Finish)
 Field observers/parties
 Feeders (observers/reports)
 Total party-hours
 Hours on foot, or by boat(w)
 Hours by car
 Total party-miles
 Miles on foot, or by boat(w)
 Miles by car
 Temperature Range (°C)
 Wind direction
 Wind speed (mph)
 Number of previous counts
 Abbreviations & Footnotes
 * seen during count period
 # high count a provincial record
 ## first time on N.B. counts
 a 5 large alcids sp.
 b Ruroq sp.
 c 1 small hawk sp, 1 large hawk sp.
 d 1 warbler sp.(prob.Myrtle), 2 loons sp. w by ship or ferry
 e 1 duck sp, 1 small gull sp, - sparrow sp.
 f 17 crossbill sp. (maybe Red)
 g 10 gulls sp, 4 songbirds sp.
 h 309 ducks sp, 3 songbirds sp.
 i 2 woodpeckers sp, 135 finches sp.
 j 1 blackbird sp.
 k 1 finch sp.
 l 1 wren sp. (prob. Myrtle), 2 loons sp. w by ship or ferry
 6 (no. underlined) count high
 (no. boxed) count first
 (for areas counted)
 4 or more years

Eastport-Campobello (E-C) continued

Christine Parker, Carl Preston, Barbara Ross, Edward Sawyer, Wm. Townsend (compiler), Barbara Vickery, Peter Vickery.

St. Andrews (StA)

Dec. 29. Clear; ground frozen, 15-20 cm crusted snow; brooks, ponds frozen. Mr & Mrs Steve Adamowitz, Mrs Hollis Bartlett, Jacqueline Davis, Mrs F. Gonya, Mrs Donald Johnson, Mrs Ken Langmaid, Mrs Cecil Lowery, H. Willa MacCoubrey (compiler), Talbot Mais, Mrs Talbot Mais, Mrs Donald McLeese, Georgie Mears, Carl Medcof, Thomas Moffatt, Mrs Fred Mutter, Mrs Ray Peterson, Mrs Donald Ross, David Walker, Mrs Sydney Wyman.

Pennfield (PENN)

Dec. 30. Sunny, becoming overcast; ground snow covered and icy; high tide a.m. David Christie, Mrs Douglas Eldridge, Dr & Mrs M. Majka, Mark Majka, Mrs. L.P. Morehouse, M.C. Morehouse, Mrs M.C. Morehouse (compiler), Eric Tull, Sylviya Ulmanis.

Lepreau (LEP)

Jan. 2. Clear; 0-5 cm crusted snow in woods, most open areas bare or ice-covered; lakes frozen, other waters open. Richard Blacquiore, David Christie (compiler), David J. Clark, Paul Clark, Gayl Hipperson, Donald McAlpine, Heather McNeil, Louise Shanahan, Eric Tull, Jim Wilson.

Saint John (SJ)

Dec. 27. Overcast with locally heavy fog; 5-15 cm snow cover with icy patches; many low-lying areas flooded; most freshwater frozen. Mrs G.O. Anglin, Ryard Armstrong, Charles Belyea, Fred Brock, David Christie (compiler), Florence Christie, Shirley Colquette, Mrs E.J. Cram, Dorothy Dickie, Marjorie Duffy, Bob Ferris, Joyce Golden, Irene Gorham, Stan Gorham, Mrs A.R. Goucher, Jim Hamilton, Ruth Hamilton, Gayl Hipperson, Grace Hayes, Francoise Howard, Det Laskey, Isabel LeBlanc, Stuart MacFarlane, Don McAlpine, Maisie Melvin, John Morrison, Phyllis Mullin, Tom Page, Don Patterson, Margaret Patterson, Joan Pearce, Ron Pearce, Gordon Redstone, Graeme Roderick, Mrs H.G. Rogers, Mary Ross, Jean Sellars, David Smith, Evan Smith, Reg Smith, Paul Tracey.

St. Martins (STM)

Dec. 29. Sunny, cold; 10-13 cm crusted snow; lakes & rivers frozen. Arline Bradshaw, James Bradshaw (compiler).

Fundy National Park (FNP)

Dec. 20. Clear and bitterly cold; Arctic sea smoke very thick a.m.; only tidal water unfrozen; 8-10 cm crusted snow throughout; birch seed crop low, conifer cones obvious only near coast; berries and weed seeds fair; standing crop of oats on the "potato farm" a definite attraction for birds. Tracy Black, Bert Buchanan, David Christie, Hank Deichmann (compiler), Mark Deichmann, Eric Emery, Norma Gray, Les Gray, David Gray, Linda Gray, Doris Hatt, Mary Majka, Ann Sheppard, Nick Sheppard, George Sinclair, Sedgewick Sinclair, Barry Spencer, Margo Spencer, Norman Wentzell.

Riverside-Albert (ALE)

Jan. 1. Overcast; 10-20 cm crusted snow; almost all freshwater frozen; a little sea ice. Helene Arbec, Florence Chayne, David Christie (compiler), Henrik Deichmann, Sue Fullerton, Christophe Germain, Paul Germain, Mary Harmer, Mary Majka, Mike Majka, George Sinclair, Sedgewick Sinclair, Eric Tull.

Sackville (SACK)

Dec. 23. Miserable - periods of light snow and ice pellets in early a.m., tapering to snow flurries by 10 am and continuing until 1 pm, cloudy remainder of day; 10-15 cm of crusted snow; freshwater frozen; salt water filled with ice flows. Peter Barkhouse, Gordon Burns, Ian Cameron, Brian Dalzell, Trevor Goward, Hinrich Harries, Ron Hounsell, Barry Hugheson, Bill Prescott, Al Smith (compiler), Stuart Tingley.

Moncton (MTON)

Dec. 21. Overcast, fine snow beginning 1:30 pm; ground frozen, 11 cm snow cover; streams flowing. Mr & Mrs Hamilton Baird, Mrs A. Burzynski, Mrs R.E. Carter, David Christie, Albert Cormier, Donald Cormier, Henry Cormier, Joan Cormier, Yves Cormier, David Curry, Brian Dalzell, Dr & Mrs Art Dobson, Daryl Doucet, Mrs Marguerite Hope, George Landry, Fred Lloyd, Paul Lloyd, Dr & Mrs. M Majka, Mark Majka, Leo Martin, Mrs Peggy McKinley, Mr & Mrs Winston Prince, Mr & Mrs F.B. Proude, Mr & Mrs W.J. Quartermain, Mr & Mrs E.M. Swinamer, Brian Townsend, Doug Whitman (compiler).

Cape Tormentine (CT)

Dec. 20. Clear and extremely cold; 5-10 cm of crusted snow; freshwater frozen, salt water mostly frozen with open leads; thin snow cover allowed ground foraging birds easy access to a variety of seeds, rose hips, etc.; few spruce cones this year. Peter Barkhouse, Gordon Burns, Roger Burrows, Ian Cameron, Stephen Clayden, Brian Dalzell, Millie Evans, Trevor Goward, Hinrich Harries, Ron Hounsell, Barry Hughson, Robert Lamberton, Bill Prescott, Al Smith (compiler), Stuart Tingley, Ralph Stoppe.

Kouchibouguac National Park (KNP)

Dec. 30. Mostly clear a.m., partly cloudy p.m.; 38-46 cm snow cover; freshwater frozen, salt water partly open. Jeannita Daigle, Roger Daigle, Carmel Levesque (compiler), Eric Richard, Norma Rodgers, Ian Walker, Lyle Walker.

Miramichi (MIR) (Newcastle-Chatham)

Dec. 20. Clear; 30 cm snow cover; all water frozen. Carl Anderson, Mrs Robert Bransfield, Tim Clarke, Mike Coster, Mrs Phyllis Cröwe, Thomas Flynn, John Keating, Don LeHeup, Mrs Sarah Lounsbury, Mrs Margaret Adams, Mrs Nora MacKensie, Carl Perry, Mrs Walter Ross, Kathy Scott, Jack Scott, Norma Rodgers, Doug Underhill, Mrs Beverly VanBeek, Mrs Jack VanLeeuwen, Mrs Winnie Walker, Ian Walker, Lyle Walker, Harry Walker (compiler), Mrs Margaret Wheaton, Ian Ward.

Sussex (SUSS)

Dec. 30. Sunny; snow covered ground. Tom Anderson (compiler), Mrs Gladys Bickford, Art Ruitenberg, Mrs Gladys Steeves.

Hammond River-Hampton (HTON)

Jan. 3. Overcast, snowing most of the day; 15-20 cm snow cover; almost all water frozen. Rick Blacquiére, David Christie, David Clark, Paul Clark, L.T. Darling, Bely Darling, Mrs Paul Kelbaugh, D. Lee, Mrs W. MacAndrews, Mrs Neil MacDonald, Marion MacKinnon, Dr & Mrs M. Majka, Heather McNeill, Geoffrey Sayre, Mrs H. Widdershoven, Mr & Mrs C.K. Wilson, Jim Wilson (compiler).

Cambridge-Warrows (C-W)

Jan. 3. Cloudy-intermittent snow; 25 cm snow on ground; lakes frozen, brooks open. Mrs. Shelton Appleby, Anna Belyea, Mrs. Harold Belyea, Mrs. Harry Belyea, Patricia Belyea, D.G. Carpenter, Mrs. Lawrence Carpenter, Mrs. Bruce Chase, Mrs. Vernon Connell, Enid M. Inch, Mrs. William McConnachie, Mrs. Arthur Perry, Mrs. John Perry, Mrs. Hazen Pugsley, Mrs. Lena Robinson, Mrs. Ernest Sypher, Nelson Thorne, Mrs. Hiven Thorne, Mrs. A.H. Walker, Mrs. Frank E. Webb. Compiler: Enid Inch.

Jamseg (Jem)

Dec. 20. Sunny, very cold. 23cm snow cover, no open water. Mrs. Heather Bunner, A.A. Dean, Kenneth Dean, Mr. & Mrs. Stephen McAllister, Mr. M.B. Moore, Miss N. Moore (compiler), David Noble, Mrs. L. O'Hara, P.A. Pearce, Mr. & Mrs. Owen Washburn.

Fredericton (FTON)

Dec. 26. Snow, increasing during day; 45cm snow cover, waters 98 percent frozen. W. Bauer, G. Clayden, H. Convery, A. Dean (compiler), K.G. Dean, K.S. Dean, L.M. Dean, D. Fowler, K. Fowler, H. Hatheway, C. Jones, Mrs. L. Keenan, D. Kristmanson, B. Langille, Miss N. Moore, A. Morais, D. Noble, B. Schneider, M. Schneider, A. Sheppard,

N. Sheppard, A. Squires, B. Squires, Mrs. H. Squires, P. Squires, W. Squires, C. Washburn, Miss S. Washburn.

Mactaquac (MAC)

Dec. 29. Sunny, open patches of water below dam. Dave Algar, Cliff Jones, Bruce Martin & friend, Ed Pelger (compiler).

Stanley (STAN)

Dec. 28. overcast am, partly cloudy pm. 30-35cm snow. open patches on Nashwaak River, trees heavily covered with ice. Harold Hatheway.

Woodstock (WSTK)

Dec. 28. Sunny. 50cm snow; very little open water. Mrs. Blair Avery, Mrs. Clinton Clark, Mrs. G.F. Clarke, Miss Ruby Clarke, Mr. A.B. Connell, Mr. Gerry Demmings, Chris Flewelling, Mrs. Nelson Flewelling, Mrs. David Fry, Mrs. Marjorie Gray, Mr. & Mrs. Eric Hadley, Mrs. Keith Helmut, Mr. & Mrs. Ken Homer, Stephen Homer, Murray Hubbard, Mrs. W.M. Jones, Donnie Kimball, Mrs. Donald Nixon, Dr. G.A. Olmstead, Eric Randall, Robert Speer (compiler), Mrs. Robert Speer, Mrs. Cecil Stewart, Ms. Donna Sutherland, Mrs. Charles Webb.

Hartland (HART)

Dec. 27. cloudy, 20-30cm snow in field, 60-75cm in woods; river frozen. Miss Florence Britton, Donald Kimball, Mrs. C.A. Rigby, Mike Rigby (compiler).

Perth-Andover (P-A)

Jan. 2. Clear, 50cm snow; river frozen. George E. Baird, Ellsworth B. Demerchant, Fred W. Tribe, Murray E. Watters (compiler).

Plaster Rock (PR)

Dec. 29. some snow and light winds. snow 60cm deep. Oliver Cooper, Mrs. Wendell Crawford, Mrs. Stephen Babatich (compiler), Mrs. Delbert Reed, Mrs. Harold Skinner.

Nictau-Riley Brook (NIC)

Jan. 4. Cloudy with snowflurries. Snow cover, Tobique River mostly frozen open in a few places. Alex & Jean Fraser, Ralph & Gladys Howard, Mrs. Archie Knowlton, Mr. & Mrs. Erwin Landsauer, Mr. & Mrs. John McCarty, Wilma Miller, Mr. & Mrs. Rudi Richter, Mr. & Mrs. Blake Sutherland. Compiler - Wilma Miller.

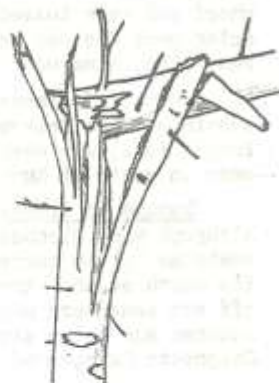
THE GROUNDHOG DAY GALE

On February 2 the Maritimes were hit by an intense, fast-moving storm, one of the worst in this century, later dubbed the Groundhog Gale. Heavy rain and winds that reached hurricane force in some areas caused flooding, power failures, and damage to buildings, bridges, wharves, boats and fishing gear. The damage was particularly severe around the mouth of the Bay of Fundy at Grand Manan and Digby Neck. Devastation of the works of man was well-reported at the time. Here we present some impressions of the effects on nature. We would like to have similar reports from other areas to include in the April issue.

Caledonia Mountain by Mary Majka

Living on a mountain has its advantages and its disadvantages, as my husband Mike likes to say. If the weather is good, it's ten times nicer than in the valley; if it's bad, it's ten times worse! We have adjusted our lives accordingly and in the last 15 years have learned to cope with everything from being isolated and without power for three to four days in the middle of winter to being covered with eight inches of snow in summer.

It was then quite normal for us to take the necessary precautions when the weather office predicted a storm. Water containers were filled, a good supply of wood brought into the house and the oil lamps checked. The storm began in the morning of February 2 and from the start the sky and the movement of the clouds had an unusual appearance. One of the advantages of living up high is that one can oversee a vast area of land and sky and usually can follow the patterns of approaching weather.



But this was not an ordinary storm. Clouds driven by terrific winds were torn and scattered, pushed and whirled. Great cloudbursts followed by patches of blue sky and sunshine passed our windows at a tremendous speed. Howling and roaring through the forest, the winds gathered momentum as they swept past the house, shaking it on its foundation and rattling the windows incessantly. The fury unleashed somewhere in higher strata descended in torrents of rain whipped against the building and trees. Above all this noise there was a constant howling of the wind in the guywires and steel structures of the two telephone and one television towers with which we share our end of the mountain.

Of course we lost our hydro near the beginning of the storm and blessed the good old woodstove around which our life then centred. The radio (converted to battery power) was reporting that a state of emergency had been declared and every hour was bringing some more disastrous news. Sadly, we watched a few birds trying to reach our feeders. Where was our flock of 50 Blue Jays and 15 chickadees? Where did the nuthatch and grosbeaks take shelter? At least the woodpeckers and squirrels were safe, we hoped. And as far as the groundhog was concerned, he might as well forget it!

Night came and slowly the wind subsided to sound more like a normal storm instead of a hurricane and the heavy rain turned to light snow. Our oil lamp made a warm circle on the kitchen table and the kettle on the woodstove was singing. We counted our blessings and wished we had a way to help those who were shivering in the darkness. The temperature rapidly dropped a staggering 20° C and by morning all the rainwater and melted snow had frozen, covering fields and roads with ice. The wind still was howling and the radio reporting what had happened down below.

On the third day we were able to survey our forest and look around to assess the damage. Walking on icy crust, 5 to 8 inches thick, we found the hardwoods strewn with broken branches. Interspersed among the beech, birch and maple, had been evergreens, mostly fir. More dense than their bare deciduous neighbours, they fell to the forest floor, hundreds of 70 to 80 year old veterans snapped in half like matches, usually six to ten feet above the ground. In open areas the wind had managed to uproot the trees, tearing them from the frozen ground to block roads and forest clearings. Sheltered by those same trees, our house sustained little damage, just a few shingles lost.

Slowly life returned to normal, our power repaired and the birds back at the feeders, but we will never forget the Groundhog Day storm.

Fundy National Park by K. H. Deichmann

Dawn of February 2, 1976 was overcast and the rain forecast looked likely. By mid-morning, it was raining heavily, but by noon the sky broke and winds were freshening, but not heavy. In fact, by 1200 hours, there was a light, steady wind.

At 1300, the winds had risen noticeably and the swell in the bay was picking up. High water, an average tide, was due by 1300, but the water kept rising, and

sometime between 1300 and 1400, ice cakes and chunks began coming up on the Alma wharf and were tossed onto the bank in the village. About that time, surf began going over the sea wall and great chunks of marram-grass sod began breaking away along Alma beach. By then the winds were blowing at 50 to 60 m.p.h.(est.).

As the afternoon progressed, the winds kept rising. By dusk, the tide was subsiding in a delayed fashion, the winds were still strong, but the rain (0.76 inches fell) was over. Maximum winds may have exceeded 80 to 90 m.p.h. and were in gusts of hurricane force.

Damage to trees: Hardwoods, being leafless, generally lost branches only, although many birches had a considerable amount of bark blown off. Balsam fir, weakened by the current budworm attack, were mainly snapped off, most falling to the north as the strongest winds came from the south. Some spruce were broken off and some were uprooted, pointing up the fact that spruce was generally sounder and has a stronger trunk than fir. Some of the worst hit areas were Chignecto Campground and Kyle Flat, but there was some damage everywhere.

Mr. Harold Hoyt, retired assistant deputy minister of the Department of Natural Resources, has related how many of the larger spruces along the Bay of Fundy show release from the Saxby Gale (Oct. 4, 1869). He noted that particularly when he scaled logs in this area in the 1930's and 1940's. The Groundhog Gale may similarly leave its mark in the growth rings of the surviving trees.

Trees on Joel's Head, some 60 to 70 feet above normal high tide line were coated with ice and rime, a condition which no one locally had ever seen before. Everywhere the snow was covered with evergreen needles, branches and bark. Many dead trees, like the ones in the beaver meadow at Caribou Plain, had much of the bark removed. Salt spray was noticeable as a gray cast over tree trunks and foliage a mile or more from the coast. Salt spray covered the windows throughout Alma, and even at Forty-five Road and Hebron.

Damage to Coast: About six to eight feet of turf has been washed away along Alma Beach. Much of the sheet piling between the swimming pool beach and Alma Beach has been dislodged. West of Alma Beach, several landslides were noted and some trees were washed out of the bank. The cross-bedded sandstone and the mudstone below the Devil's Half Acre were undercut very noticeably, with cuts five to six feet deep noted. Further along towards Herring Cove, rocks were tossed from the lower beach wall up to the top of the tideline. If there had been spring tides as are predicted for February 17-19, inclusive, the damage would have been much more severe.



At Point Wolfe, many tree stumps and trunks and logs and other debris litter the dune; one wharf foundation barely visible last year is very obviously exposed. It will be interesting to see if subsequent spring tides wash away the newly deposited debris.

Effect on Wildlife - On February 3, a "wrecked" Dovekie that had run out of sea room was picked up by Doug Kane near Cape Enrage. On the 3rd, 5 Ring-billed Gulls, an unusual winter record, were seen on Alma Beach. On the next day at least 50 Iceland and Glaucous Gulls were seen at the mouth of the Alma River, again an unusually high number, and undoubtedly storm refugees. By February 8, the arctic gulls (both Glaucous and Iceland) were gone. Downed trees will enhance feeding conditions for white tailed deer and snowshoe hares for the rest of the winter.

Here and There by David Christie

A museum trip to the Lepreau area on Feb. 11 revealed some of the effects of the storm waves. By the Dipper Harbour wharf, a relatively sheltered location, large rocks low on the tidal shore had been flipped over to expose encrusting sponges on top and hide seaweeds beneath. Some of them probably weighed over half a ton. On bedrock, much of the kelp and rockweed had been clipped short by the force of the sea tugging at their fronds.

Along the Maces Bay shore, a band of seaweed a couple of feet deep and several feet wide, marked the high tide line. Most of the algae was rockweed (Ascophyllum and Fucus spp.) but kelps (Alaria, Laminaria spp., Agarum) were well represented and smaller species such as dulse could be found by poking about among the large brown forms. Animals too had been plucked from the sea bottom and tossed ashore. Lobsters and Rock Crabs were dismembered, but most other creatures were whole. Starfish and sea cucumbers of various kinds were common (Solaster spp., Asterias spp., Cucumaria and Psolus). Fairly frequent were sea urchins and horse mussels. Deadman's finger Sponges, sea potatoes, sea peaches, ten-ridged neptunes, and waved whelks were also found.

In Albert County, the beach that protects Waterside Marsh was scoured by waves and ice. The plentiful driftwood there was lifted and deposited back in the marsh by the storm tide and the beach-grass Elymus mollis was obliterated from view. The renewal of growth in spring will reveal whether the underground rhizomes were ripped up or just the aerial shoots that grew last summer. At Mary's Point, the sand dunes, which had been significantly eroded during the autumn spring tides, were not damaged by the Groundhog Gale. Huge ice cakes, some ten feet thick, filled Ha Ha Bay but, grounding in the shallows, formed a protective wall that broke the force of the sea well out from shore. However, salt spray was whipped inland to coat vegetation and buildings. A transplanted Hemlock that had been doing well for two years turned brown within a week. (Another Hemlock that I had often admired lost its top during the storm. That one, a large and very tapering tree standing by itself at Lincoln, near the eastern end of the Fredericton Airport runway has been a prominent landmark along Route 7 for years.)

At Saint John, Saints Rest Beach is reported to be severely eroded. Chickadees and White-throated Sparrows disappeared from my bird feeder. Two chickadees on Mar. 7 were the first seen after the storm. Other people also reported the disappearance of birds but in most cases some of them returned or were replaced within a week. Dr. James O'Brien lost from eight to ten chickadees at his feeder in Saint John West and they did not return. Similar effects were noticed in eastern Maine, as reported in The Guillemot by Bill Townsend. In Maine, some Horned Grebes were blown from the sea to inland areas. I haven't heard of such occurrences in New Brunswick following this storm.



Do you know what tracks of a fox or raccoon look like? And where to find the abandoned nest of a Red-winged Blackbird? Well, you may not know but your children can teach you that and much more besides.

They will show you how to build a bird feeder or tell you all about the life of a prairie dog — who is not a dog at all. They know something about the newly discovered bacteria and yeast cells that can help in cleaning up oil spills. And, speaking of yeast, your children will be able to explain by what principle your bread rises and, to top it all, they will make you a delicious batch of pretzels.

Yes, children — Canadian children — have a new magazine of their own. OWL, a publication of the Young Naturalists' Foundation, is an excellent gift for the generation of young people who should be more aware of the natural world around them.

Before OWL became a reality it was very carefully planned and researched, in order to develop a truly worthwhile Canadian magazine for children. This publication will acquaint them with animals, plants, conservation problems and the activities of other children all across the country.

What is most refreshing is the great emphasis on active participation in various games, experiments and crafts that OWL invites the reader to do. Also it asks children to share with the editors and other children by sending in their own letters, poems, drawings and reactions to the magazine. "All Your Own" is a two page section reserved especially for children's contributions.

"Albert, My Dog" by Farley Mowatt should be of great interest to the young reader. It tells the story of a "special" dog who was almost human. A poster in the centre that can be carefully detached to decorate a child's room and a comic section — always very attractive to youngsters — are yet more reasons why any parent, especially a naturalist, should subscribe to OWL for their or other people's children.

The federation has secured a number of copies of the first issue of OWL. For a free copy to examine and show your friends — young and old — write to Mary Majka, Caledonia Mountain, RR # 3, Hillsborough, N.B. Or, to subscribe, send \$6 for ten issues, or \$11 for twenty issues to OWL, 59 Front Street East, Toronto, Ont. M5E 1B3. The next issue will appear in April, the following one in June. And beginning in fall, OWL will be published monthly from September through June. (Outside Canada please add \$2 per subscription.) — Mary Majka.

(Ed. Note: Mary Majka is a member of the editorial advisory board of OWL, representing the New Brunswick Federation of Naturalists. OWL was formerly The Young Naturalist published by the Federation of Ontario Naturalists.)



Wildlife Art Course at Sunbury Shores

For the second year, Sunbury Shores Arts and Nature Centre will be offering a three-week instructional course in wildlife art at St. Andrews. From July 5 to 23, instructor Gary Low who has had one-man shows at the Royal Ontario Museum and the McMichael Gallery of Canadian Art, will help a small class with techniques of portraying wildlife, by themselves and as part of their environment, using a variety of media. Fee for the course is \$125.

Sunbury Shores has asked our federation to sponsor a scholarship for one of the students but the board of directors felt there was too little time to organize a scholarship fund. The board endorsed the idea and recommends that members who are interested in assisting a student in the wildlife art course send donations directly to Sunbury Shores Arts & Nature Centre, Box 100, St. Andrews, N.B. You will receive a receipt for income tax purposes.

Energy Options

Want to become less dependent on N.B. Power and Venezuelan oil? Maine Audubon Society has begun to publish a newsletter entitled Maine Energy Options which will highlight new alternate energy developments, describe technological progress and keep you up to date on new equipment and publications. It will strive to contribute to the application of alternate energy uses in Maine and will be almost equally pertinent to New Brunswick conditions.

The December issue describes the solar heating system built on site at Maine Audubon's new Gilsland Farm headquarters and the Wilton Wastewater Treatment Plant which combines solar heating, methane generation and various energy saving procedures in an award winning plant. The Gilsland Farm system will provide 72% of the heat in a 5500 square foot building at an installation cost of about \$8000. Also included in the December issue is information on other alternate energy magazines and brief notes on four books that deal with solar water heating.

Maine Energy Options will be published bimonthly and is available at \$5 per year from Maine Audubon Society, 53 Baxter Blvd., Portland, Maine 04101. - D.C.

Twelve Peregrines Released

The first twelve Peregrine Falcons released from the captive breeding program at Cornell University were set free last summer at locations in New York, Massachusetts, Maryland and New Jersey. All the birds were nestlings placed in artificial eyries and tended till they were able to hunt successfully. It is hoped the birds will return to breed in two or three years when they have matured. The former Peregrine breeding population disappeared from the eastern U.S. because of reproductive failures caused by DDT residues. Now with DDT no longer in use in the States it is hoped the birds can again be successful. At one time they were even found nesting on ledges of skyscrapers in the largest of cities. - D.C.

Melanistic Snowshoe Hares

Have you ever seen a black Snowshoe Hare? A report by Rosemary Curley in the February Newsletter of the Natural History Society of Prince Edward Island notes many instances of black hares being seen and suggests that close to one in 100 hares on P.E.I. is thus coloured. Those melanistic hares do not turn white in winter and must stand out conspicuously on fresh snow. Elsewhere in Canada the incidence of melanism is exceedingly rare in the Snowshoe Hare. Have you ever seen a black one in New Brunswick? - D.C.

Hawk Silhouettes Reduce Window Kills

Full-sized Cooper's Hawk silhouettes cut out of cardboard and placed behind large windows at the State University of New York in Oswego reduced by 75% the number of songbirds killed by flying against the glass. If you have a picture window that's hard on birds, why not try this remedy. - D.C.

1974-75 Waterfowl Harvest

Figures in the Canadian Wildlife Service report on the 1974-75 hunting season (F.G. Cooch, K. Newell & H. Raible, C.W.S. Progress Note 57, Dec.1975) estimate 4,270,000 ducks and geese shot in Canada. The 58,723 ducks taken in New Brunswick were predominantly Black Ducks (38%), Green-winged Teal (19%), goldeneyes (11%), Blue-winged Teal (7%) and Ring-necked Ducks (7%). Mallard, Pintail, Wood Duck and Lesser Scaup each accounted for 2%. All other species were each 1% or less of the total kill. The estimated kill of Canada Geese in this province was 2,864. - D.C.