



# N.B. Naturalist

Vol. 6, No. 1, February 1975

This number is very much dominated by material on birds, perhaps a natural thing during a season when many forms of life are dormant and hibernating. We are, however, introducing now a phenological survey of the blooming dates of several common wildflowers. We hope it will add extra interest to your outings this spring.

All members are reminded that articles and news relating to nature and naturalists organizations are needed for future issues.

Editorial Committee

## "CRIME AGAINST NATURE"

(Highlights of Dr. Fred Knelman's Address to the Annual Meeting of the Conservation Council of New Brunswick at UNB, Saint John, Dec. 6, 1974. Reprinted from CCNB News, Vol. 6, No. 1, Feb. 4, 1975).

"We are committing a crime against nature," says Dr. Fred Knelman in reaction to present trends in energy development in relation to the environment.

We are faced with a huge amount of waste, he said, noting that "by known techniques and technology, ones that are totally proven in terms of programming, we could make an enormous saving without profound changes in life style or attitude, simply by 'cutting the fat'."

Speaking at the fifth annual meeting of the conservation council, Dr. Knelman said there is a tendency on the part of our governments, our utilities, the nuclear establishment, and even our universities, to think that there is no option except for the proliferation of nuclear power. The large-scale development of nuclear power is almost a fait accompli in our society, he said.

Dr. Knelman described an option to the self-fulfilling industrial projections for energy use in what he terms the "technical fix scenario." He demonstrated that simply by applying proven technology energy usage could be reduced as much as 50 percent by the year 2000. Eventually, a zero energy growth may have to be imposed as a social standard, Dr. Knelman speculated.

What is needed, he said, is a sound and rational energy policy - one that links energy and environment.

"They are causally and integrally linked. We cannot have a policy for the environment and one for energy with competing jurisdictions."

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The New Brunswick Naturalist is published six times a year by the New Brunswick Federation of Naturalists, 277 Douglas Avenue, Saint John, N.B.  
Editorial Committee: David Christie, Mary Majka, Peter Pearce.  
Federation membership is available at \$2 (individual or family) or \$1 (student to age 18). Library subscription rate: \$2 per year. Fees should be directed to the treasurer, Jim Wilson, R.R. 3, Rothesay, N.B.

"When you discover that you have multiple options, then you have truly an energy policy and environmental policy integrated ... there are real tradeoffs ... not self-fulfilling prophecy."

Dr. Knelman said we must challenge the fait accompli attitude. There must be adequate time for impact studies in nuclear developments, for example, and we must look at costs other than market costs.

"What is the cost of degrading water? What is the cost of degrading air? What is the energy used? What is the net energy value?"

Dr. Knelman points a finger at Point Lepreau in this respect. "There was no in-depth environment impact, social impact or ecology assessment of any nature. They did it in an awful hurry and under such urgency that in the course of the very study they had already ordered a \$30 million turbine."

"Utilities are the most beautiful example of institutions that perpetuate themselves. Unless we really do have options ... this sort of internal dynamics of our institutions is suicidal."

#### ENVIRONMENTAL GROUPS FORM INTERNATIONAL COUNCIL

Toronto - Representatives of major conservation organizations in Canada and the United States agreed November 24 to form a Canada - United States Environmental Council.

The 14 organizations (including the Canadian Nature Federation, Canadian Wildlife Federation, Pollution Probe - Toronto, National Audubon Society, Sierra Club and The Wilderness Society) with a combined membership of approximately 1,000,000, agreed to meet again in Washington, D.C. in March.

"This may be the most significant organizational development in the conservation movement in North America in many years," said Dr. Ian McLaren, of Halifax, president of the Canadian Nature Federation, spokesman for the Canadian organizations represented at the three-day meeting.

"It is critically urgent that environmentalists in Canada and the United States join together in close co-operation to meet head-on a host of critical environmental issues of interest to both countries," said Stewart Brandborg, of Washington, D.C., Executive Director of The Wilderness Society. "This step in bringing the Council into being is a major accomplishment. We have an excellent beginning for a strong working relationship between citizen groups in both countries to represent the public interest as opposed to the strong influences of entrenched special interest groups."

Following the meeting representatives issued a communiqué, containing statements on arctic fossil fuel resources, the Garrison Diversion Project and oil transport through the Straits of Juan de Fuca.

#### AUDITOR'S REPORT


10110-124 Street, Suite 201  
Edmonton, Alberta

To the New Brunswick Federation of Naturalists:

As auditor appointed to the Federation, I have checked the books and the financial statement of the Federation for the period January 1 to December 31, 1974. I am in complete agreement with the figures shown.

With best wishes

February 5, 1975

  
C. Eric Tull

FINANCIAL STATEMENT, JANUARY 1, 1974-DECEMBER 31, 1974

Cash on hand, Dec. 31, 1973

\$ 622.51

Receipts

Subscriptions for 1974:

Regular @ \$ 2.00	314	\$ 628.00
Student @ \$ 1.00	7	7.00
Library @ \$ 2.00	9	18.00
	<u>330</u>	<u>\$ 653.00</u>

Subscriptions for 1975:

Regular @ \$ 2.00	22	<u>44.00</u>	\$ 697.00
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Bank account interest

66.28

Exchange on American cheques

.08

Total Income

\$ 763.36

Disbursements

N.B. Naturalist:

Postage	\$ 117.00	
Stationery	<u>129.98</u>	\$ 246.98

General Postage

20.96

Printing

1.50

Treasurer's Supplies

5.24

Telephone calls (miscellaneous)

21.90

Atlantic Naturalists' Policy Session:

Expenses	\$1231.62	
Less Government Grant	<u>1100.00</u>	131.62

Annual General Meeting:

Hall Rental	5.00	
Postage, publicity	29.00	
Telephone and misc.	<u>5.01</u>	39.01

Machias Seal Island Trips:

Boat fare	95.00	
Receipts from passengers	<u>80.00</u>	15.00

Memberships:

CNF, CCNB - 1974	30.00	
CNF - 1975	<u>25.00</u>	55.00

Total disbursements:

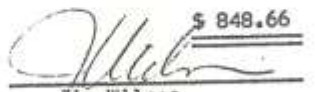
\$ 537.21

Net increase in funds during the year

\$ 226.15

Cash Balance on Hand, December 31, 1974

\$ 848.66

  
Jim Wilson  
Treasurer, NBFN/FNNB.



#### BLACK DUCK DOOMED?

In "The Changing Seasons" report of the October 1974 issue of American Birds (28:884), James Tate, Jr. suggests that "the Black Duck is probably doomed" through hybridization with the Mallard which is extending its range as a result of the opening up of eastern forests. In southern Ontario, the Black Duck is now much outnumbered by Mallards, and many Maine and New Hampshire Blacks have Mallard features.

Atlantic Canada's Black Ducks still seem relatively pure, though they have absorbed the blood lines of many pen-reared Mallards released by hunting enthusiasts. The spreading trend of Mallard domination should be watched for; our local breeding population of Black Ducks may be susceptible, although Newfoundland, Labrador and eastern Quebec should be pretty inhospitable for Mallards. - D.C.

#### WATERFOWL, OIL AND TIDAL POWER

A recent paper by two biologists of the Canadian Wildlife Service should be of interest to NEFN members. "The Potential Influence on Waterfowl of Port and Tidal Power Development in the Bay of Fundy" by P.A. Pearce and A.D. Smith (Canadian Wildlife Service Report Series 29, 1974, H. Boyd, editor) discusses the effect on geese and ducks of deep water oil ports (existing and proposed) and of tidal power generation facilities.

The authors report that increased risk of oil spills could have important effects on waterfowl while implementation of the tidal power proposals would adversely affect birds by substantially decreasing the amount of tidal marsh and mudflat. By continental standards, few ducks and geese will be affected but the Bay of Fundy may be more important to sea-birds and shorebirds, about which less is known. Surveys inaugurated in 1974 should considerably improve our knowledge of the use made by shorebirds of the littoral zone of the Bay of Fundy. - D.C.

#### 1974 CHRISTMAS BIRD COUNTS

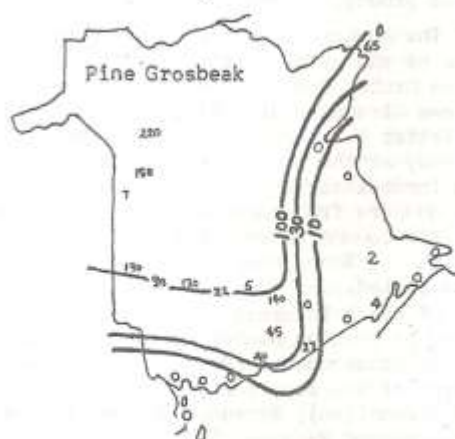
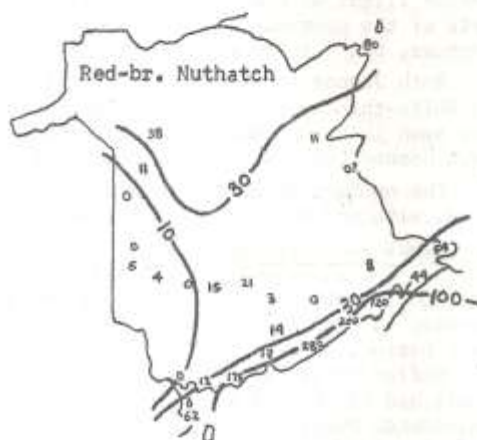
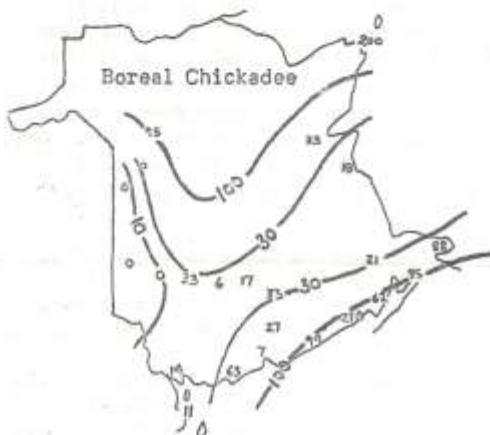
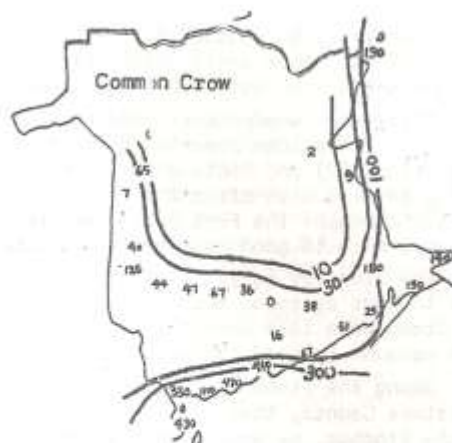
David Christie

Although November was somewhat cool with two major snow storms near the end of the month, December temperatures averaged two to four Fahrenheit degrees above normal and only the extreme northern part of the province received large snowfalls (47.6 inches at Charlo). Thus, a normal variety of species were discovered on the 27 Christmas Bird Counts this winter.

It is disappointing not to have counts from Dalhousie and from Grand Manan but four former counts, Plaster Rock, Nackawic, Sussex and Riverside-Albert were reported again. In total, 384 participants spent 660 party-hours afield and reported from 113 feeding stations, tallying 49,688 birds of 103 species. Another six species were seen during the count period but not on count day.

The most unusual birds found were individual Carolina Wrens at St. Andrews and Saint John, respectively the first and second records of that species in the province, and a Pine Warbler at Sackville, a first for Christmas Bird Counts in New Brunswick.

Several species of trees, especially the spruces and fir, had an excellent crop of seeds. The same situation must have applied widely throughout the boreal forest for there were no marked invasions of winter finches. On the other hand the abundance of Black-capped Chickadees and Red-breasted Nuthatches was undoubtedly related to the cone crop. Both were at their highest level for the period 1960-1974. The chickadee abundance was widespread but nuthatches were especially numerous only along the extreme southern edge of the province and to a lesser degree at Nictau and Lamèque in the north. (See map). Golden-crowned Kinglets, confined



Abundance (individuals per 100 hours) of six species, from 1974 Christmas Bird Count data in New Brunswick. (Figures for the jay, chickadee and nuthatch include an allowance of 2 hours for each bird-feeder reporting; figures for crow, kinglet and grosbeak based on field party-hours alone.)



almost entirely to southeastern and south-central N.B., were also found in record numbers. Of the other small forest birds, Boreal Chickadees were in fairly good numbers and White-breasted Nuthatches and Brown Creepers were about average.

Three-toed woodpeckers were noted more frequently than normal. Especially interesting is the seldom reported Northern Three-toed, the one with the barred back, seen at Hartland (2) and Nictau. At Sackville, four of them were discovered, with Black-backs, several days after the count. (Those birds are still there, in a spruce woods 150 yards behind the Fort Beauséjour Museum.) The more common Downy and Hairy Woodpeckers were also in good numbers this year.

The Blue Jay is yet another species found in high numbers, 1972 being the only year to have exceeded this one. Gray Jays and Ravens were recorded in average numbers but Crows were less common than usual. Brown-headed Cowbirds and Red-winged Blackbirds were present in good numbers. Grackle numbers were average.

Among the finches, Evening Grosbeaks were in average numbers. Interestingly, on Christmas Counts, they have not shown any marked fluctuations for the past six years. Purple Finches, as usual, were scarce, 36 at Woodstock being the only significant count. A minor flight of Pine Grosbeaks affected mostly the northwestern and west-central parts of the province. Common Redpolls were scarce and Pine Siskins were barely more numerous, but there was a fair scattering of Goldfinches in the southern counties.

Both Juncos and Tree Sparrows were in low numbers, while the less commonly wintering White-throated, Fox and Song Sparrows were about average. Although Snow Buntings were seen in normal numbers, not a single Lapland Longspur was spotted with them. Only seven Horned Larks were seen; perhaps the November snows pushed most of them south.

The numbers of Robins were rather low this year and no Bohemian Waxwings were noted, although two Cedars were discovered at Plaster Rock.

Hawks and owls were not particularly common but Northern Shrikes occurred on 18 counts. The Snowy Owl flight that has been very large on the prairies this year was recorded in only a minor way by our counts - a total of 4 birds. Ten Bald Eagles were reported on five counts and, very pleasingly, five additional areas noted eagles during count period.

Ruffed Grouse seem to be at a high point of their population cycle; southern N.B. counts had their best year for them for the period 1960-74. For some reason, few Ring-necked Pheasants were seen; they are normally more apparent when lots of snow is on the ground, so possibly this year was a bit on the open side for them to be conspicuous. The numbers of waterbirds are not as easily comparable from year to year as are those of the widely distributed landbirds. Recorded in relatively good numbers were Horned Grebe, Canada Goose, Black Duck, Bufflehead, Common Eider and Purple Sandpiper, whereas Glaucous Gull, Black-legged Kittiwake and Razorbill were scarcer than normal. The latter two species apparently were concentrated on the Nova Scotia side of the Bay of Fundy at the time of the counts. A good number of Black Scoters (100) was noted at Cape Tormentine but the Fundy counts had few. Iceland Gulls were found in reasonably good numbers from Moncton to Saint John but were rather low on the east coast. Two of the less common waterfowl found were a Harlequin Duck and 4 King Eiders, both at St. Andrews. A Snow Goose and 3 Canvasbacks were observed in the Saint John area during count period.

Of great interest are the 21 Yellow-rumped (Myrtle) Warblers on the Cape Tormentine count, an amazing number during December in New Brunswick. Individual Myrtles were found on four other counts (Fredericton, Hampton, Moncton, St. Andrews) this year. Additional records of the less hardy or somewhat unusual species included Palm Warbler (Sackville, Cape Tormentine), Savannah Sparrow (Sackville), Chipping Sparrow (Sackville, St. Andrews), White-crowned Sparrow (Fredericton), Cardinal (Saint John), Winter Wren (Fundy Park), Ruby-crowned Kinglet (Cape Tormentine, Sackville), Belted Kingfisher (Hampton), Mourning Dove (16 on 3 counts), Am. Kestrel (Hampton, St. Andrews), Pintail (Sussex, Albert), Hooded Merganser (Nictau) and Pied-billed Grebe (Jemseg).

## Christmas Bird Counts — Dec. 14-31, 1974

# - record high for the province

## - new species for New Brunswick counts

90 (number underlined - record high for the area)

Robin (species underlined) - new species for area

Note: Underlining of records is indicated only for areas surveyed four or more years.

MICHAU - RILEY BROOK (4th year) - Dec. 31; 7:45 am to 5:15 pm. Clear a.m., partly cloudy p.m.; temp. 7°-22°; wind N, 0-5 mph. 18" snow cover; Tobique River open in a number of places. 7 observers in 2-3 parties; 8 at 4 feeders. Tot. party-hours, 18½ (11½ on foot, 7 by car); tot. party-miles, 73½ (9½ on foot, 64 by car).  
 Com. Goldcrests, 20; Hooded Merganser, 1; Com. Merganser, 1; Bald Eagle, 1; Pileated Woodpecker, 1; Hairy Woodpecker, 17; Downy Woodpecker, 8; Black-backed 3-toed Winkr., 2; Gray Jay, 32; Blue Jay, 88; Raven, 63; Black-capped Chickadee, 96; Boreal Chickadee, 25; White-br. Nuthatch, 2; Red-br. Nuthatch, 10; Golden-cr. Kinglet, 2; N. Shrike, 1; House Sparrow, 72; Grackle, 1; Evening Grosbeak, 5; Purple Finch, 3; Pine Grosbeak, 40; Pine Siskin, 58; Goldfinch, 11. Total: 24 species, 567 birds. (Seen in count period: Ruffed Grouse). David Christie, Alex & Joan Fraser, Ralph & Gladys Howard, Mr & Mrs John McCarty, Erwin Landsauer, Chris Majka, Dr. M. Majka, Mark Majka, Mary Majka, Wilma Miller (compiler), Blake & Margaret Sutherland.

FLINTER ROCK (3rd year) - Dec. 30; 8:30 am to 6 pm. Cloudy with light snow till mid-pm; temp. 26°-32°; wind 0-5 mph. 24" snow cover. 4 observers in 2 parties; 1 at feeder. Tot. party-hours, 15½ (6½ on foot, 9 by car); tot. party-miles, 134 (10 on foot, 124 by car).  
 Ruffed Grouse, 4; Pheasant, 2; Rock Dove, 14; Hairy Woodpecker, 11; Downy Woodpecker, 11; Gray Jay, 23; Blue Jay, 72; Raven, 73; Crow, 10; Black-capped Chickadee, 68; Red-br. Nuthatch, 2; Cedar Waxwing, 2; Starling, 16; House Sparrow, 281; blackbird sp. (incl. Rusties), 16; Cowbird, 11; Pine Grosbeak, 23; Tree Sparrow, 2; Snow Bunting, 100. Total: 19 species, 741 birds. (Seen in count period: Snow-shed Owl, Goldfinch.) Mrs. Maurice Dumas, Erwin Landsauer, Marion Landsauer, Mrs. Stephen Rabstich (compiler), Mrs. Jack Reynolds.

PERTH-ANDOVER (6th year) - Dec. 28; 8 am to 5 pm. Clear; temp. 20°; wind 2-4 mph. 12" or more snow cover; rapid water open. 5 observers in 3 parties; 2 at feeders. Tot. party-hours, 27 (6 on foot, 21 by car); tot. party-miles, 66 (1 on foot, 65 by car).  
 Com. Merganser, 3; Ruffed Grouse, 1; Rock Dove, 32; Hairy Woodpecker, 5; Downy Woodpecker, 4; Gray Jay, 3; Blue Jay, 47; Raven, 24; Crow, 2; Black-capped Chickadee, 39; Boreal Chickadee, 2; Starling, 14; House Sparrow, 85; Evening Grosbeak, 10; Pine Grosbeak, 2; Junco, 2; Snow Bunting, 9. Total: 17 species, 284 birds. (Seen in count period: Bald Eagle, Spruce Grouse, Pheasant.) George Baird, Emory Campbell, Ellsworth Desrosiers, Fred Tribe, Murray Waters (compiler).

LESLAND (4th year) - Dec. 24; 8:30 am to 5 pm. Cloudy; temp. 27°-30°; wind NW, 1-3 mph. 4"-10" snow cover; river open with ice flows. 4 observers in 3 parties; 1 at feeder. Tot. party-hours, 10 (on foot); tot. party-miles, 9 (on foot).  
 Pileated Woodpecker, 1; Hairy Woodpecker, 5; Downy Woodpecker, 2; Horned 3-toed Winkr., 2; Blue Jay, 3; Raven, 106; Crow, 4; Black-capped Chickadee, 59; Robin, 1; Golden-cr. Kinglet, 2; N. Shrike, 1; Starling, 6; House Sparrow, 9; Grackle, 1; Evening Grosbeak, 14; Goldfinch, 1; finch sp. (Redpoll/Siskin), 5; Tree Sparrow, 4; Snow Bunting, 32. Total: 19 species, 258 birds. (Seen in count period: Ruffed Grouse, Pheasant, Rock Dove, Boreal Chickadee, Red-br. Nuthatch.) Donald Kimball, Mrs. C.A. Rigby, Michael Rigby (compiler), Wendell Shaw.

WOOSTOCK (11th year) - Dec. 27; 8:30 am to 4:30 pm. Cloudy with scattered snow flurries; temp. 18°; wind, SW, 10 mph. 3"-5" snow and drifts; water frozen. 6 observers in 2 parties; 12 at 11 feeders. Tot. party-hours, 15 (4 on foot, 11 by car); tot. party-miles, 150 (7 on foot, 143 by car).  
 Red-tailed Hawk, 1; Hawk sp., 2 (1 Marsh?); Ruffed Grouse, 1; Pheasant, 2; Rock Dove, 201; Hairy Woodpecker, 3; Downy Woodpecker, 9; Gray Jay, 5; Blue Jay, 102; Raven, 36; Crow, 19; Black-capped Chickadee, 68; Red-br. Nuthatch, 2; Starling, 71; House Sparrow, 234; Grackle, 3; Cowbird, 3; Evening Grosbeak, 58; Purple Finch, 36; Pine Grosbeak, 29; Com. Redpoll, 27; Tree Sparrow, 2. Total: 22 species, 914 birds. (Seen in count period: Bald Eagle, Barred Owl, N. Shrike.) Mrs. Randall Dyer, Mrs. David Fry, Mrs. Marjorie Gray, Ken Hunter, Stephen Hunter, Marney Hubbard, Mrs. W.H. Jones, Mrs. Chas. MacDonald, Mrs. Donald Nixon, Dr & Mrs G. O'Connell, Eric Randall, Mr & Mrs Robert Speer, Robert J. Speer (compiler), Mrs. Cecil Stewart, Mrs. T.M. Stanton, Mrs. Chas. Webb.

NACMATIC (2nd year) - Dec. 30; 7:45 am to 4:30 pm. Overcast with snow flurries in am., clearing in pm.; temp. 31°; wind light, to 10 mph. 6" snow in fields; freshwater frozen, except rapids. 15 observers in 4-5 parties; 2 at feeders. Tot. party-hours, 22½ (10 on foot, 12½ by car); tot. party-miles, 188 (13 on foot, 175 by car).  
 Red-tailed Hawk, 1; Ruffed Grouse, 2; Rock Dove, 53; Hairy Woodpecker, 6; Downy Woodpecker, 1; Gray Jay, 1; Blue Jay, 162; Raven, 78; Crow, 10; Black-capped Chickadee, 119; White-br. Nuthatch, 2; Red-br. Nuthatch, 1; Brown Creeper, 3; N. Shrike, 2; Starling, 72; House Sparrow, 186; Evening Grosbeak, 9; Pine Grosbeak, 20; Red Crossbill, 20. Total: 19 species, 748 birds. (Seen in count period: Pileated Woodpecker, Rusty Blackbird, Grackle, Junco, Tree Sparrow, Snow Bunting.) David Alward, Ford Alward (compiler), Jean Alward, Mark Alward, Claire Cronkrite, David Given, Arden McElwain, Barry Sharpe, Betty Rockwell, Robert Squires, W.A. Squires, Lulu Stairs, Mrs. Jack Thompson, Nancy Thompson, Mollie Trail.



STANLEY (2nd year) - Dec. 22; 10 am to 4:05 pm. Light overcast with mist in pm.; temp. 20-35°; wind nil. Light snow cover, slushy in spots; Moose running with ice on banks. 1 observer. Tot. party-hours, 6 (1 on foot, 5 by car); tot. party-miles, 83 (2 on foot, 81 by car).

hawk sp. (Marsh?), 1; Blue Jay, 14; Raven, 1; <sup>4</sup>Pine Grosbeak, 10; Can. Redpoll, 20; finch sp., 2. Total: 6 species, 50 birds. (Seen in count period: Robin.) Harold Hatheway. \* House Sparrow, 2;

MACTAGUE (3rd year) - Dec. 21; 8:15 am to 4:15 pm. Overcast, becoming sunny after 11:06; temp.: 17°F wind: 2-3 mph. 6" snow cover; water open below dam. 6 observers in 4 parties; 1 at feeder. Total party-hours, 28 (9 on foot, 19 by car); total party-miles 210 (15 on foot, 195 by car).

Black Duck, 155; Common Goldeneye, 34; Common Merganser, 46; Ruffed Grouse, 2; Great Black-backed Gull, 12; Herring Gull, 5; Rock Dove, 31; Pileated Woodpecker, 1; Hairy Woodpecker, 6; Downy Woodpecker, 5; Northern 3-toed Wipkr., 1; Gray Jay, 3; Blue Jay, 76; Raven, 15; Crow, 13; Black-capped Chickadee, 60; Boreal Chickadee, 10; White-breasted Nuthatch, 2; Brown Creeper, 1; Robin, 1; Starling, 4; House Sparrow, 107; blackbird sp., 24; Evening Grosbeak, 4; Purple Finch, 2; Pine Grosbeak, 37; Pine Siskin, 76; Goldfinch, 67; Junco, 6; Tree Sparrow, 14; Song Sparrow, 3. Total: 31 species, 823 birds. (Seen in count period: Bald Eagle, Spruce Grouse, Ruby-crowned Kinglet). Dave Alger, Steve Clayden, Cliff Jones, Bruce Martin & friend, Ed Felger (compiler).

FREDRICKSON (19th year) - Dec. 26; 8 am to 4:30 pm. Sunny; temp. 3°-18°; wind: NW, 15-24 mph. 1" snow cover; waters 99% frozen. 33 observers in 14 parties; 13 at feeders. Total party-hours, 58 (26 on foot, 32 by car); total party-miles 259 (42 on foot, 217 by car). Common Goldeneye, 26; Common Merganser, 28; Rough-legged Hawk, 1; Ruffed Grouse, 16; Great Black-backed Gull, 12; Rock Dove, 504; Great Horned Owl, 1; Pileated Woodpecker, 1; Hairy Woodpecker, 14; Downy Woodpecker, 20; Gray Jay 3; Blue Jay, 131; Raven, 130; Crow, 39; Black-capped Chickadee, 351; Boreal Chickadee, 5; White-breasted Nuthatch, 6; Red-breasted Nuthatch, 13; Brown Creeper, 2; Golden-crowned Kinglet, 24; Starling, 1065; Yellow-rumped Warbler, 1; House Sparrow, 1992; Red-winged Blackbird, 1; Rusty Blackbird, 1; Cowbird, 7; Evening Grosbeak, 143; Pine Grosbeak, 13; Common Redpoll, 35; Pine Siskin, 27; Goldfinch, 10; Junco, 11; Tree Sparrow, 21; White-crowned Sparrow, 2; White-throated Sparrow, 7; Fox Sparrow, 2; Song Sparrow, 4; Snow Bunting, 8. Total: 38 species, 4677 birds. (Seen in count period: Black Duck, Bald Eagle, Pheasant, Robin, Grackle, Purple Finch). B. Bartlett, W. Bauer, M. Cameron, G. Clayden, S. Clayden, H. Convery, P. Convery, A. Dean (compiler), K. Dean, Miss E. Dean, Miss L. Dean, Miss L. Dean, P. Dilworth, T. Dilworth, D. Gibson, H. Hatheway, C. Jones, Mrs. L. Keenan, D. Kristianson, Miss N. Moore, A. Morris, P. Ruess, P. Schneider, A. Squires, E. Squires, E. Squires, T. Squires, W. Squires, R. Stoeck, R. Stoeck Jr., I. Warty, O. Washburn, S. Washburn.

JONES (12th year) - Dec. 14; 8:05 am to 4:40 pm. Dull, bleak; temp. 23°-33°; wind: SW, 0-5 mph. 2" - 3" snow cover. Still water frozen; rivers open. 15 observers in 4 parties; 1 at feeder. Total party-hours, 22½ (4 on foot, 18½ by car); total party-miles 196 (5 on foot, 191 by car).

Common Loon, 1; Pied-billed Grebe, 1; Common Goldeneye, 19; Common Merganser, 42; ducks sp., 5; Bald Eagle, 4; Great Black-backed Gull, 6; Herring Gull, 13; gull sp., 1; Rock Dove, 3; Great Horned Owl, 1; Pileated Woodpecker, 1; Hairy Woodpecker, 4; Downy Woodpecker, 4; Blue Jay, 56; Gray Jay, 4; Raven, 21; Crow, 8; Black-capped Chickadee, 52; Boreal Chickadee, 4; Red-breasted Nuthatch, 5; Golden-crowned Kinglet, 9; Northern Shrike, 3; Starling, 10; House Sparrow, 277; Pine Grosbeak, 1; Tree Sparrow, 5; Song Sparrow, 1; Snow Bunting, 450. Total: 27 species, 1011 birds. (Seen in count period: Snowy Owl, White-breasted Nuthatch, Brown Creeper, Evening Grosbeak, Robin, Yellow-rumped Warbler, Goldfinch). Rev. & Mrs. C.E.J. Cragg, A.A. Dean, Kenneth Dean, Edna A. Inch, Mr. & Mrs. Stephen McAllister, Melvin B. Moore, Nettie Moore (compiler), Peter A. Pearce, Dr. & Mrs. W. Austin Squires, Peter Taylor, Oren Washburn and Susan Washburn.

CAMBRIDGE-NARROWS (5th year) - Dec. 28; 8 am to 4:45 pm. Sunny; temp. 23°-27° wind: NW, 10 mph. 2" snow on ground, lakes & brooks frozen. 11 observers in 3 parties; 10 at feeders. Total party-hours, 16½ (7½ on foot, 9 by car); total party-miles 116 (9 on foot, 107 by car).

Ruffed Grouse, 2; Great Horned Owl, 1; Hairy Woodpecker, 3; Downy Woodpecker, 10; Gray Jay, 6; Blue Jay, 71; Raven, 51; Black-capped Chickadee, 120; Boreal Chickadee, 12; Red-breasted Nuthatch, 1; Brown Creeper, 2; Golden-crowned Kinglet, 6; Starling, 3; House Sparrow, 167; Cowbird, 1; Pine Grosbeak, 22; Pine Siskin, 1; Goldfinch, 16; White-winged Crossbill, 4; Tree Sparrow, 8; Snow Bunting, 50. Total: 21 species, 557 birds. (Seen in count period: Canada Goose, Evening Grosbeak). Mrs. Harry Belyea, Harold & Marion Belyea, Anna Belyea, D.G. Carpenter, Mrs. Kenneth Carpenter, Mrs. Lawrence Carpenter, Mrs. Vernon Connell, Edna M. Inch (compiler), Rhoda G. Inch, Mrs. John Perry, Mrs. William MacCormack, Mrs. R.G. Robinson, Mrs. Ernest Sypher, Miven & Joyce Thorne, Nelson Thorne, Noel Thorne, Mrs. Frank E. Webb, Mrs. George Williams, Miss Elizabeth Worden.

HAMMOND RIVER-HAMPTON (3rd Year) - Dec. 29, 7:25 am to 3:45 pm. Sunny in am, cloudy later; temp. 21°-27°; wind: 0-10 mph. Snow cover 6" - 8". Virtually all water frozen. 10 observers in 4 parties; 5 at feeders. Total party-hours, 27 (12 on foot, 15 by car); total party-miles (212½ (17½ on foot, 195 by car). Common Goldeneye, 7; Common Merganser, 6; merganser sp., 3; Goldfinch, 1; Rough-legged Hawk, 2; Kestrel, 1; Great Black-backed Gull, 1; Herring Gull, 1; Rock Dove, 51; Kingfisher, 1; Pileated Woodpecker, 1; Hairy Woodpecker, 10;



Downy Woodpecker, 18; Blk-backed 3-toed Wipkr., 1; wipkr. sp., 2; Horned Lark, 2; Blue Jay, 125; Raven, 95; Crow, 6; Black-capped Chickadee, 150; Boreal Chickadee, 10; Red-breasted Nuthatch, 5; Brown Creeper, 4; Robin, 3; Golden-crowned Kinglet, 36; Northern Shrike, 2; Starling, 164; Yellow-rumped Warbler, 1; House Sparrow, 454; Red-winged Blackbird, 6; Grackle, 2; Cowbird, 56; Evening Grosbeak, 83; Pine Grosbeak, 12; Pine Siskin, 2; Goldfinch, 101; White-winged Crossbill, 3; Junco, 15; Tree Sparrow, 47; White-throated Sparrow, 3; Song Sparrow, 1; Snow Bunting, 26. Total: 41 species, 1520 birds. (Seen in count period: Bald Eagle, Spruce Grouse, Ruffed Grouse, Mourning Dove, Great Horned Owl, Barred Owl). Rick Elacqua, Dave Christie, David Clark, Paul Clark, Louis Darling, Roland Darling, Mrs. B. Holt, Mrs. Paul Kolbaugh, Mary Majka, Dr. Majka, Don Molpino, Charles Wilson, Stuart Mills, Jean Wilson, Jim Wilson (compiler).

SUSSEX (2nd year) - Dec. 14; 7:35 am to 4:30 pm; cloudy, very light snow flurries; temp. 25°-30°; wind: NE, 0-6 mph. Still water skimmed, very scattered patches of snow in shaded areas only. 6 observers in 2 parties. Total party-hours 10.5 (2.5 on foot, 8.05 by car); total party-miles 124.5 (3.5 on foot, 121 by car). Black Duck, 8; Pintail, 1; Common Merganser, 6; Hawk sp. (Sharp-shinned ?), 1; Red-tailed Hawk, 1; Ruffed Grouse, 2; Herring Gull, 1; Rock Dove, 94; Screech Owl, 1; Pileated Woodpecker, 1; Hairy Woodpecker, 2; Downy Woodpecker, 3; wipkr. sp. 1; Gray Jay, 2; Blue Jay, 30; Raven, 90; Crow, 4; Black-capped Chickadee, 21; White-breasted Nuthatch, 1; Golden-crowned Kinglet, 14; Starling, 347; House Sparrow, 472; Rusty Blackbird, 1; Cowbird, 60; Tree Sparrow, 1. Total: 24 species, 1155 birds. Tom Anderson, Mrs. D. Barber, Mrs. Wm. L. Bickford, Henrik Deichmann (compiler), Beryl Corbin, Art Rutenberg, Micks Rutenberg.

THE LAMAR-B-SHIREMAN (7th year) - Dec. 28; 9 am to 4:45 pm; sunny; temp. 22°; wind: 15-20 mph. 15" - 20" snow cover; sea frozen north side of island only. 5 observers in 2 parties. Total party-hours 14 (3 on foot, 11 by car); total party-miles 127 (3 on foot, 124 by car). Common Golden eye, 1; Oldsquaw, 3; Duck sp., 1; Iceland Gull, 7; Great Black-backed Gull, 5; Herring Gull, 5; Rock Dove, 6; Raven, 5; Crow, 27; Black-capped Chickadee, 43; Boreal Chickadee, 28; Red-breasted Nuthatch, 11; Golden-crowned Kinglet, 5; Northern Shrike, 1; Starling, 64; Grackle, 1; Evening Grosbeak, 2; Pine Grosbeak, 9; White-winged Crossbill, 2; finch sp., 25; Snow Bunting, 7. Total: 19 species, 258 birds. (Seen in count period: Hairy Woodpecker). Hilda Chasson (compiler), Rose-Alma Chasson, Adrian Dugsty, Arnel Gulgard, Guy Roche.

MIRAMICHI (NEWCASTLE-CHATHAM, 3rd year) - Dec. 21; 7:45 am to 5 pm. Cloudy, light snow until 9:00 am; temp. 32°-34°; wind: 1-5 mph. 2 ft. snow, river partly frozen. 13 observers in 6 parties; 6 at feeders. Total party-hours, 33 (18 on foot, 15 by car); total party-miles 72 (17 on foot, 55 by car). Black Duck, 1; Common Merganser, 12; Red-breasted Merganser, 8; Bald Eagle, 1; Spruce Grouse, 2; Ruffed Grouse, 9; Great Black-backed Gull, 325; Herring Gull, 110; Rock Dove, 67; Hairy Woodpecker, 2; Downy Woodpecker, 6; Gray Jay, 10; Blue Jay, 85; Raven, 58; Crow, 1; Black-capped Chickadee, 70; Boreal Chickadee, 15; White-breasted Nuthatch, 2; Red-breasted Nuthatch, 5; Brown Creeper, 3; Northern Shrike, 1; Starling, 66; House Sparrow, 1200; Red-winged Blackbird, 2; Grackle, 3; Cowbird, 13; Evening Grosbeak, 42; Common Noddy, 80; Tree Sparrow, 10; Snow Bunting, 1. Total: 30 species, 2210 birds. (Seen in count period: Pileated Woodpecker). Carl Anderson, John Bethell (compiler), Marilyn Boston, Edith Boudreau, Roger Gullant, John Kesting, Stephen Landry, Debbie LeBeau, Helen Lohan, Anna MacDonald, Carl Perry, Norma Rogers, Doug Underhill, Elaine Walker, Harry Walker, Ian Walker, Winnie Walker, Ian Ward, Tom Whelan.

KOLIBROUAC NATIONAL PARK (5th year) - Dec. 27; 8:30 am to 4 pm. Temp. 20°-26°; wind W, 10 mph. 10"-12" snow cover; freshwater frozen. 7 observers in 3 parties. Tot. party-hours, 22 (11 on foot, 11 by car); tot. party-miles, 96 (25 on foot, 71 by car). Oldsquaw, 50; White-winged Scoter, 1; Merganser sp., 2; Glaucous Gull, 1; Great Black-backed Gull, 42; Herring Gull, 63; Gray Jay, 7; Blue Jay, 2; Raven, 12; Crow, 2; Black-capped Chickadee, 36; Boreal Chickadee, 4; Nuthatch sp., 1; N. Shrike, 2; Starling, 50; House Sparrow, 11; Evening Grosbeak, 6; Snow Bunting, 6. Total: 18 species, 298 birds. Jeannette & Roger Daigle, John Kesting, Norma Rogers, Elizabeth Rooney (compiler), Ian Walker, Iyla Walker.

CH. B. FORMENTINE (14th year) - Dec. 14; 7:30 am to 4:00 pm; 12 observers in 6-11 parties. Total party-hours, 50 (35 on foot, 15 by car). Total party-miles 185 (43 on foot, 142 by car). Cloudy all day, temp. 25°-30°; wind W 8-10 mph decreasing to 5-8 mph by 1400 hours. Ground bare and frozen, fresh water partially frozen, salt water open.

Red-necked Grebe, 2; Double-crested Cormorant, 2; Common Loon, 1; Red-throated Loon, 1; Canada Goose, 194; Black Duck, 205; Greater Scaup, 18; Common Goldeneye, 337; Oldsquaw, 429; Common Eider, 30; White-winged Scoter, 251; Surf Scoter, 11; Black Scoter, 100; Common Merganser, 54; Red-breasted Merganser, 90; Duck sp., 45; Grackle, 1; Rough-legged Hawk, 1; Ruffed Grouse, 7; Phoebe, 2; Iceland Gull, 38; Great Black-backed Gull, 49; Herring Gull, 233; Ring-billed Gull, 51; Black-legged Kittiwake, 3; Rock Dove, 6; Mourning Dove, 3; Pileated Woodpecker, 1; Hairy Woodpecker, 2; Downy Woodpecker, 11; Horned Lark, 1; Gray Jay, 5; Blue Jay, 95; Raven, 34; Crow, 70; Black-capped Chickadee, 172; Boreal Chickadee, 44; Red-breasted Nuthatch, 27; Golden-crowned Kinglet, 66; Ruby-crowned Kinglet, 2;

Northern Shrike, 1; Starling, 52; Yellow-rumped Warbler, 21; Palm Warbler, 1; House Sparrow, 325; Rusty Blackbird, 1; Grackle, 3; Cowbird, 240; Evening Grosbeak, 3; Goldfinch, 15; Junco, 16; Tree Sparrow, 23; White-throated Sparrow, 2; Song Sparrow, 1; Snow Bunting, 450; songbirds sp., 6. Total: 54 species, 3,854 birds. Bill Barrow, Rick Blaculiere, Paul Bogard, Gordon Burns, Ian Cameron, Heinrich Harries, Barry Hughson, Eleanor Magee, Bill Prescott, Al Smith (compiler), Stuart Tingley, Brian Trenholp.

MONTICLO (15th year) - Dec. 15; 8 am to 5 pm. overcast, occasional fine snow; temp. 25°-26°; wind: 10-15 mph. Ground mostly bare, streams flowing. 15 observers in 7 parties, 11 at 6 feeders. Total party-hours 41 (23 on foot, 18 by car); total party-miles 253 (28 on foot, 225 by car).

Canada Goose, 31; Mallard, 20; Black Duck, 9; Common Merganser, 26; Red-tailed Hawk, 1; Ruffed Grouse, 3; Pheasant, 7; Glaucous Gull, 1; Iceland Gull, 59; Great Black-backed Gull, 875; Herring Gull, 1,484; Rock Dove, 97; Hairy Woodpecker, 3; Downy Woodpecker, 12; Blue Jay, 56; Raven, 72; Crow, 74; Black-capped Chickadee, 96; Boreal Chickadee, 11; Red-breasted Nuthatch, 4; Brown Creeper, 1; Robin, 4; Golden-crowned Kinglet, 20; Northern Shrike, 1; Starling, 686; Myrtle Warbler, 1; House Sparrow, 427; Red-winged Blackbird, 1; Cowbird, 15; Evening Grosbeak, 150; Pine Grosbeak, 1; Common Redpoll, 6; Goldfinch, 16; White-winged Crossbill, 3; Junco, 3; Tree Sparrow, 10. Total: 36 species, 4287 birds. (Seen in count period: Accipiter, sp.). Mr. & Mrs. Hamilton Baird, George Baine, D.S. Christie, Mr. & Mrs. Henry Comdar, Brian Dalzell, Dr. & Mrs. Arthur Dobson, Mr. & Mrs. Jack Fraser, Fraser Hale, Marguerite Hope, Fred & Paul Lloyd, Dr. M. Majka, Mary Majka, Leo Martin, Mr. & Mrs. Winston Prince, Mr. & Mrs. F.B. Prude, Mr. & Mrs. W.J. Quartermain, D. Whitson (compiler), Lorin Whitson.

SAGEVILLE (16th year) - Dec. 18; 7.30 am to 4.30 pm; intermittent light rain in early am partially clearing with sunny intervals by 9 am; overcast by 10 am with light snow flurries between 2 and 3 pm. temp. 38°; cooling appreciably after 3 pm; wind: NW 8-10 mph; ground bare and mostly frozen in open exposed areas; fresh water partially frozen, salt water open. 12 observers in 7-10 parties plus 6 feeder reports. Total party-hours 52½ (27½ hours on foot, 25½ hours by car). Total party-miles 293 (37 on foot, 256 by car).

Canada Goose, 57; Mallard, 4; Black Duck, 203; Common Merganser, 8; Sharp-shinned Hawk, 2; Rough-legged Hawk, 6; Ruffed Grouse, 3; Pheasant, 8; Iceland Gull, 1; Great Black-backed Gull, 103; Herring Gull, 308; Ring-billed Gull, 3; Rock Dove, 112; Snow Owl, 1; Hairy Woodpecker, 8; Downy Woodpecker, 10; Black-backed 3-toed Woodpecker, 4; Horned Lark, 4; Gray Jay, 13; Blue Jay, 89; Raven, 89; Crow, 81; Black-capped Chickadee, 237; Boreal Chickadee, 61; White-breasted Nuthatch, 1; Red-breasted Nuthatch, 28; Robin, 1; Golden-crowned Kinglet, 168; Ruby-crowned Kinglet, 1; Loggerhead Shrike, 1; Northern Shrike, 2; Starling, 563; Pine Warbler, 1; Palm Warbler, 2; House Sparrow, 809; Red-winged Blackbird, 2; Cowbird, 83; Pine Siskin, 8; Goldfinch, 8; Savannah Sparrow, 1; Junco, 12; Tree Sparrow, 18; Chipping Sparrow, 1; White-throated Sparrow, 2; Song Sparrow, 3; Snow Bunting, 4; sparrow, sp., 1; Total: 46 species, 3,166 birds. (Seen in count period: Northern Three-toed Woodpecker, Mockingbird, E. Meadowlark, Grackle, Evening Grosbeak, Cn. Redpoll, White-winged Crossbill). Bill Barrow, Paul Bogard, Gordon Burns, Ian Cameron, Heinrich Harries, Ronald Housell, Barry Hughson, Don McLennan, Reid McManus, Bill Prescott, Al Smith (compiler), Stuart Tingley, Mrs. E.A. Weldon, Mrs. John Clark, Mr. & Mrs. Bill Black, Dr. & Mrs. W. Godfrey, Mr. Lindsay Smith, Mrs. Roger Calkins.

REVERSHIDE-ALBERTA (6th year) - Dec. 22; 8.45 am to 5.15 pm. overcast with sunny periods and occasional snow-flurries. temp. 29°-34° wind: N, 0-10 mph. Ground almost bare at coast, 6" snow cover inland, ponds and lakes frozen, other water open. 6 observers in 3-5 parties. Total party-hours, 24 (14 on foot, 10 by car); total party-miles 171 (12 on foot, 159 by car).

Red-throated Loon, 26; Black Duck, 287; Pintail, 1; Common Eider, 8; Black Scoter, 3; Common Merganser, 5; Rough-legged Hawk, 1; Ruffed Grouse, 6; Purple Sandpiper, 240; Glaucous Gull, 2; Iceland Gull, 58; Great Black-backed Gull, 12; Herring Gull, 31; Ring-billed Gull, 19; Short-eared Owl, 1; Hairy Woodpecker, 2; Downy Woodpecker, 5; Gray Jay, 15; Blue Jay, 35; Raven, 61; Crow, 6; Black-capped Chickadee, 137; Boreal Chickadee, 15; Red-breasted Nuthatch, 28; Robin, 4; Golden-crowned Kinglet, 15; Northern Shrike, 1; Starling, 99; House Sparrow, 208; Red-winged Blackbird, 1; Purple Finch, 1; Pine Grosbeak, 1; Common Redpoll, 4; Goldfinch, 233; Junco, 17; Tree Sparrow, 4; White-throated Sparrow, 1; Song Sparrow, 3. Total: 38 species, 1556 birds. (Seen in count period: Canada Goose, Barred Owl). David Christie (compiler), Henrik Dolchmann, Mark Majka, Mary Majka, Dr. M. Majka, Karole Pittman.

FURNY NATIONAL PARK (10th year) - Dec. 15; 7.30 am to 5.00 pm. snow flurries; temp. 22°-25°; wind: NE, 10 mph. Ground bare on the coast, 3-4" crusty snow inland. 13 observers in 7 parties; 3 at feeders. Total party-hours 29½ (17 on foot, 12½ by car); total party-miles 193 (21 on foot, 172 by car).

Red-throated Loon, 3; Black Duck, 28; Ruffed Grouse, 2; Glaucous Gull, 1; Iceland Gull, 1; Great Black-backed Gull, 4; Herring Gull, 89; Barred Owl, 1; Downy Woodpecker, 2; Black-backed 3-toed Woodp., 1; Gray Jay, 4; Blue Jay, 33; Raven, 9; Crow, 15; Black-capped Chickadee, 182; Boreal Chickadee, 95; Red-breasted Nuthatch, 70; Brown Creeper, 3; Winter Wren, 1; Robin, 1; Golden-crowned Kinglet, 40; Northern Shrike, 3; House Sparrow, 1;



Red-winged Blackbird, 3; Grackle, 3; Common Redpoll, 2; Goldfinch, 38; Junco, 14; Snow Bunting, 3. Total: 29 species, 660 birds. (Seen in count period: Hooded Merganser, Sharp-shinned Hawk, Great Horned Owl, Hairy Woodpecker, Starling, Cowbird, Evening Grosbeak, Pine Grosbeak, Tree Sparrow). Jean Desautel, Tracy Black, Eric Brown, Freda Rutland, Howard Copp, Hendrick Deichmann (compiler), Joanna Deichmann, Mark Deichmann, Norma Gwy, Doris Hatt, Thelma Kierstead, James McLaughlin, Fred McKinley, Albert Murphy, Laurie Murphy, Gary Pittman, Harold Pittman, Barry Spencer.

ST. MARTINS (9th year) - Dec. 20; 9.15 am to 4.45 pm. overcast am, sunny pm; temp. 26°, wind: NW, 5 mph. Ground frozen, some ice in rivers, lakes partly open. 2 observers in 2 parties. Total party-hours, 7½ (3 ¾ on foot, 3½ by car); total party-miles 56 (6 on foot, 50 by car).

Red-throated Loon, 2; Black Duck, 7; Sharp-shinned Hawk, 1; Rough-legged Hawk, 1; Ruffed Grouse, 2; Purple Sandpiper, 12; Gray Jay, 3; Blue Jay, 12; Raven, 24; Crow, 5; Black-capped Chickadee, 27; Boreal Chickadee, 7; Red-breasted Nuthatch, 21; Robin, 6; Northern Shrike, 1; Purple Finch, 2; Pine Grosbeak, 2; Slate-coloured Junco, 4; Tree Sparrow, 2; White-throated Sparrow, 1; Song Sparrow, 1. Total: 21 species, 143 birds. (Seen in count period: Canada Goose, Goldeneye, Herring Gull, Starling, House Sparrow, Red-winged Blackbird, Cowbird). Mr. & Mrs. James Bradshaw (compilers).

SAINT JOHN (18th year) - Dec. 28; 7.10 am to 5.20 pm; sunny; temp. 23°-32° wind: NW, 3-15 mph. 2" snow cover; open patches in Saint John River, other freshwater frozen. 16 observers in 7 parties, 30 at 28 feeders. Total party-hours, 40½ (25½ on foot, 15 by car); total party-miles 275½ (21½ on foot, 254 by car). Great Cormorant, 1; Canada Goose, 1; Mallard, 8; Black Duck, 473; Common Goldeneye, 204; Barrow's Goldeneye, 2; Rufflehead, 34; Oldsquaw, 1; Common Eider, 3; White-winged Scoter, 8; Surf Scoter, 6; Black Scoter, 7; Common Merganser, 12; Red-breasted Merganser, 48; Sharp-shinned Hawk, 2; Rough-legged Hawk, 5; Bald Eagle, 2; small falcon sp., 1; Ruffed Grouse, 10; Pheasant (probably escaped), 1; Purple Sandpiper, 50; Glaucous Gull, 6; Iceland Gull, 47; Great Black-backed Gull, 380; Herring Gull, 2960; Ring-billed Gull, 7; Black-headed Gull, 1; Rock Dove, 358; Mourning Dove, 7; Snow Owl, 2; Hairy Woodpecker, 13; Downy Woodpecker, 26; Black-backed 3-toed Woodpecker, 1; Gray Jay, 2; Blue Jay, 88; Common Raven, 119; Common Crow, 167; Black-capped Chickadee, 229; Boreal Chickadee, 7; White-breasted Nuthatch, 6; Red-breasted Nuthatch, 16; Brown Creeper, 3; Wren, Carolina, 1 4/4; Robin, 10; Golden-crowned Kinglet, 8; Northern Shrike, 1; Starling, 2135; House Sparrow, 797; Red-winged Blackbird, 7; Common Grackle, 24; Brown-headed Cowbird, 48; Cardinal, 1; Evening Grosbeak, 74; Pine Grosbeak, 16; Pine Siskin, 1; American Goldfinch, 11; Slate-coloured Junco, 17; Tree Sparrow, 40; White-throated Sparrow, 13; Fox Sparrow, 2; Swamp Sparrow, 1; Song Sparrow, 15; Snow Bunting, 35. Total: 62 (plus 1) species, 8596 (plus 1) birds. (Seen in count period: Snow Goose, Pintail, Canvasback, Ruby-crowned Kinglet). Mrs. C.G. Anglin, Ryard Armstrong, Clarence Beattie, Fred Brock, Mrs. Smith Cathline, David Christie (compiler), Florence Christie, Paul Clark, Shirley Colquette, Mrs. E.J. Cram, Marjorie Duffy, Joyce Golden, Bernice Gorham, Stan Gorham, Mrs. A.R. Goucher, Mr. & Mrs. Jim Hamilton, Grace Hayes, Mrs. R.W.G. Holt, Mrs. G.L. Hunter, Ron Hughes, Cecil Johnston, Mrs. S.R. Jones, Dot Laskey, Isabel LeBlanc, Vivian MacDonald, Stuart MacFarlane, Mary McJannet, Mike McJannet, Don McAlpine, Maizie Melvin, Mrs. P. Mallin, Bill O'Brien, Tom Page, Don Patterson, Margaret Patterson, VI Ramsay, Gordon Redstone, Graeme Roderick, Mrs. H.G. Rogers, Mary Ross, Joan Sellers, Marion Sherwood, Evan Smith, Reg Smith, Jim Wilson.

LESTER (15th year) - Dec. 21; 7.50 am to 5.20 pm. clear; temp. 20°-29° wind: W, 0-5 mph. 1" snow cover; rivers open, lakes mostly frozen. 6 observers in 2-3 parties. Total party-hours, 19 (12 on foot, 7 by car); total party-miles 126 (7 on foot, 119 by car).

Common Loon, 11; Horned Grebe, 87½; Great Cormorant, 2; Black Duck, 32; Greater Scaup, 5; Common Goldeneye, 99; Rufflehead, 51; Oldsquaw, 117; Common Eider, 360; Surf Scoter, 8; Common Merganser, 7; Red-breasted Merganser, 14; hawk sp., 1; Purple Sandpiper, 436; Glaucous Gull, 1; Iceland Gull, 1; Great Black-backed Gull, 63; Herring Gull, 632; Razorbill, 1; Black Guillemot, 1; Short-eared Owl, 1; Hairy Woodpecker, 1; Downy Woodpecker, 5; Gray Jay, 7; Blue Jay, 1; Raven, 62; Crow, 92; Black-capped Chickadee, 43; Boreal Chickadee, 12; Red-breasted Nuthatch, 33; Robin, 2; Golden-crowned Kinglet, 5; Northern Shrike, 4; Starling, 110; House Sparrow, 30; Red-winged Blackbird, 2; Cowbird, 14; Pine Siskin, 5; Goldfinch, 1; White-winged Crossbill, 3; Junco, 2; Tree Sparrow, 9; White-throated Sparrow, 2; Song Sparrow, 2; Snow Bunting, 50. Total: 46 species, 2428 birds. (Seen in count period: Red-tailed Hawk, Rough-legged Hawk, Bald Eagle, Spruce Grouse). Art Callaghan, David Christie (compiler), Paul Clark, Don McAlpine, Gordon Redstone, Jim Wilson.

PERFECTED - LESTER (7th year) - Dec. 26; 8 am to 4 pm; sunny, some clouds, temp. 4° wind: NW, light. mainly bare ground; abt tide to low water. 2 observers in 1 party. Total party-hours, 8 (by car), total party-miles 30 (by car).

Can. Loon, 1; Red-necked Grebe, 2; Horned Grebe, 5; Great Cormorant, 26; Black Duck, 5; Rufflehead, 29; Oldsquaw, 26; Can. Eider, 14; White-winged Scoter, 11; Red-br. Merganser, 2; duck sp., 1; Great Black-backed Gull, 27; Herring Gull, 948; small gull sp., 2; Black Guillemot, 1; Rock Dove, 57; Blue Jay, 1; Crow, 99; Black-capped Chickadee, 5; Red-br. Nuthatch, 1; Robin, 1; Starling, 32; Tree Sparrow, 4; White-throated Sparrow, 1. Total: 23 species, 1295 birds. (Seen in count period: Downy Woodpecker, Grackle, Evening Grosbeak.) M.C. Morehouse, Mrs. M.C. Morehouse (compiler).

ST. ANDREWS (14th year) - Dec. 15; 8 am to 5:20 pm. Sunny & clear; temp. 17°; wind light, 5 mph. No snow, ponds frozen, lakes partly open. 5 observers in 3 parties; 11 at 10 feeders. Tot. party-hours, 24 (7 on foot, 17 by car); tot. party-miles, 124 (15 on foot, 109 by car).

Com. Loon, 7; Red-necked Grebe, 8; Horned Grebe, 17; Great Cormorant, 2; Black Duck, 127; Greater Scaup, 43; Common Goldeneye, 22; Rufflehead, 85; Oldsquaw, 7; Harlequin Duck, 1; Com. Eider, 350; King Eider, 4; White-winged Scoter, 83; Surf Scoter, 142; Black Scoter, 6; Red-br. Merganser, 5; Bald Eagle, 2; Kestrel, 1; Ruffed Grouse, 3; Purple Sandpiper, 32; Great Black-backed Gull, 39; Herring Gull, 136; Ring-billed Gull, 2; Rock Dove, 26; Mourning Dove, 6; Pileated Woodpecker, 1; Hairy Woodpecker, 10; Downy Woodpecker, 4; Gray Jay, 1; Blue Jay, 57; Raven, 9; Crow, 79; Black-capped Chickadee, 98; Boreal Chickadee, 6; White-br. Nuthatch, 1; Brown Creeper, 2; Carolina Wren, 1<sup>st</sup>; Robin, 2; N. Shrike, 1; Starling, 43; Yellow-rumped Warbler, 1; House Sparrow, 87; Rusty Blackbird, 1; Grackle, 2; Cowbird, 10; Evening Grosbeak, 11; Goldfinch, 1; White-winged Crossbill, 5; Junco, 5; Chipping Sparrow, 1; Tree Sparrow, 26; White-throated Sparrow, 7; Song Sparrow, 4. Total: 53 species, 1634 birds. (Soon in count period: Sharp-shinned Hawk, Osprey, Ruby-crowned Kinglet, Red-winged Blackbird.) Mrs. Hollie Bartlett, Jacqueline Davis, Harold Hunter, Mrs. Donald Johnson, Wella McCoubrey (co-compiler), Norman Mair, Dr. & Mrs. Donald McLespe, Rose Metcalick, Tom Moffatt, Mrs. Fred Mutter, Mrs. Donald Ross, Aivara Steadco, Wayne Stobo (co-compiler), David Walker, Mrs. Sydney Wyman.

EASTPORT-CAMPBELL (8th year) - Dec. 23; 7 am to 4 pm EST. Clear a.m., cloudy p.m.; temp. 18°-32°; wind SE, 10 mph. Freshwater frozen, salt open. 14 observers in 3 parties; 3 at feeders. Total party-hours, 26 (1 on foot, 25 by car); tot. party-miles, 168 (5 on foot, 163 by car).

Com. Loon, 11; Red-thr. Loon, 2; Red-necked Grebe, 6; Horned Grebe, 58; Great Cormorant, 76; Mallard, 1; Black Duck, 442; Greater Scaup, 2; Com. Goldeneye, 222; Rufflehead, 388; Oldsquaw, 221; Com. Eider, 68; White-winged Scoter, 37; Surf Scoter, 32; Black Scoter, 7; Com. Merganser, 8; Red-br. Merganser, 44; Rough-legged Hawk, 1; Purple Sandpiper, 40; Great Black-backed Gull, 252; Herring Gull, 2630; Ring-billed Gull, 5; Black-legged Kittiwake, 3 (very low); Thick-billed Murre, 11; Dovekie, 1; Black Guillemot, 3; Rock Dove, 59; Downy Woodpecker, 9; Blue Jay, 32; Raven, 21; Crow, 112; Black-capped Chickadee, 20; Boreal Chickadee, 4; Red-br. Nuthatch, 20; N. Shrike, 4; Starling, 999; House Sparrow, 115; Grackle, 12; Evening Grosbeak, 2; Junco, 6; Tree Sparrow, 15; White-throated Sparrow, 1; Fox Sparrow, 5 (at one feeder); Song Sparrow, 2. Total: 45 species, 5997 birds. Arl. Bates, Kathryn Calder, Charles Dorchester, Mary Dorchester, Jane Dudley, John Dudley, Betty Lark, Daryl Linton, Sheila Mallick, Larry Moore, Barbara Ross, Edward Sawyer, Bill Townsend (compiler), Janet Weston.

#### THE MARITIME BALD EAGLE, OSPREY AND PEREGRINE FALCON SURVEY

The Maritime Bald Eagle, Osprey and Peregrine Falcon Survey will continue in the fall and winter of 1974-75. The past year has been particularly productive in assessing the status of these birds in the Maritimes, but there is still much to be done. Much of the success can be attributed to the excellent cooperation received from the brigade of volunteers who provided needed information on the distribution and nesting of these birds. Our aerial reconnaissance (confined to N.B. and P.E.I.) was very rewarding.

Would you please send in all your observations on eagle and osprey occurrence and nesting that, to date, have not been forwarded to me. Your continued observations on fall and winter concentrations and movements are solicited. We sincerely appreciate your assistance in this survey. — R.F. Stoeck, Maritime Forest Ranger School, R.R. No. 5, Fredericton, N.B.

#### PURPLE SANDPIPER OBSERVATIONS WANTED

Guy Morrison and Ken Ross (Canadian Wildlife Service, 2721 Highway 31, Ottawa K1A 0H3) are currently working on a report to summarize the data NBFN members and others gathered for the Maritimes Shorebirds Survey last summer and fall. They are also very interested in obtaining reports of overwintering Purple Sandpipers. Reports may be sent directly to them or to the N.B. Museum, 277 Douglas Ave., Saint John.

#### WINTER OBSERVATIONS

For inclusion in the "Nature News" section of the April issue of N.B. Naturalist, nature observations from the winter (Dec. 1 to March 15) should be sent to the Natural Science Dept., N. B. Museum, by March 31.

#### THE CANADIAN BEAVER

Intimately associated with the history of Canada, the beaver will soon, at long last, gain official recognition as an emblem of Canada.



Estimated preference scale

- 5 - superior  
4 - excellent  
3 - good  
2 - fair  
1 - poor  
0 - no interest

FOOD PREFERENCE OF WILD BIRDS AT FEEDERS

	Milo	Sunflower seeds	Raw peanuts	Cracked corn	Mixed seeds	Suet	Dried	Squash seed	Cracked wheat	Apples	Raisins	Millet	Shelled corn	Peanut butter	Currants	Corn bread	Oranges	Oats	Thistle seed
Pheasant	0	0.7	0.5	5.0	0.6	4.8	0.4	0	0	0.2	0.2	0.1	0	2.5					
Hairy Woodpecker	0.6	1.0	1.4	0.7	0.7	4.7	0.3	0	1.0	0.1	0.1	0.6	0	2.3			0	0	0
Downy Woodpecker	1.1	4.2	2.1	3.1	2.1	1.8	2.7	1.3	1.8	0.7	1.3	1.1	3.4	0.3	0	3.2	0	0.6	0.8
Blue Jay	0	0	0	2.2	1.8	1.0						1.5							
Crow	1.1	4.4	4.0	0.7	1.9	3.2	1.3	1.3	0.7	0.4	0.1	1.8	0.2	2.6	0		0	0.6	0.5
Black-c. Chickadee	0	0	0	0	1.7	2.5	0	0						3.3					
Nuthatch	0	0	0.3	0.2	1.0	4.0	0.8	0	2.0	3.1	3.1	0.3	0.3	2.7					
Brown Creeper	0.9	0.6	0.9	0.7	1.6	2.6	2.2	0	0.2	0	0			4.0	1.5	2.5	1.0		
Mockingbird	0.7	0.7	0.3	3.4	1.5	0	1.5	0	0	2.0	2.8	0.6	0	0	3.7	2.3	1.4	0	
Brown Thrasher	0.3	0.1	0	0	0.7	0.7	2.2	0	0	2.0	2.8	0.6	0	0	3.7	2.3	1.4	0	
Robin	0	0	0	0	2.8														
Ruby-crowned Kinglet	2.0	1.5	1.3	3.2	3.0	4.0	3.9	2.4	1.8	2.6	1.9	0.4	3.4	1.8	1.8	4.7	0.3	1.3	0.3
Starling	0	0	0	1.7	4.2														
Myrtle Warbler	3.2	2.6	0.6	3.6	4.5	0.4	3.7	0.3	2.7	0.3	1.1	3.3	1.8	1.8	1.5	4.6	0	3.0	2.0
House Sparrow	2.0	2.6	0.9	3.4	3.9	0.3	2.3		2.5	0.1	0.4	2.4	2.5	0				3.8	0.7
Red-w. Blackbird	1.4	3.1	1.0	3.7	3.7	1.2	3.4		1.3	0.8	0.1	1.7	0	1.0					
Grackle	2.4	1.3	0.1	3.2	4.4	0.7	1.7		2.5	0.1	0	2.4	0.6	0.7		0.3	0	2.2	0.3
Cowbird	0.8	4.9	1.2	0.8	1.1	0.1	0.1	0	0.4	0.7	0	0.9	0.4	0.6		0	0.5	2.0	1.0
Evening Grosbeak	0.9	4.7	1.2	1.0	2.3	0.5	0.3		1.4	0.1	0.1	1.4	0.3	0.7	0	2.4	0.2	0.7	2.9
Purple Finch	4.8	1.8	0.3	1.5	0				2.8	0	0	1.8	0	0.5			0		
Pine Grosbeak	2.7	0.4	2.1	3.6	0.5	0.3			0	0	0.2	1.5	0	1.0					
Redpoll	2.3	4.4	0.7	1.5	2.4	0.1	0.6		3.0	0.3	0	2.1	0.3	0					
Goldfinch	2.2	1.4	0.1	2.5	3.6	0.1	0.6		3.0	0.3	0	2.1	0.3	0					
Iowhee	2.7	1.7	0.7	2.1	3.9	0.4	1.5	0.2	2.2	0.2	0.1	3.3	0.9	0.8	0	3.0	0	2.5	0.8
Junco	3.8	1.4	0.3	2.2	3.7	0.4	1.6	0.3	2.7	0	0	3.9	0.2	1.0				1.0	1.0
Tree Sparrow	3.7	1.2	0.1	2.9	3.7	0.4	2.4	0	2.3	0.7	0	3.6	0.4			3.3		2.2	1.8
Wh-throat Sparrow	2.7	2.3	0.4	2.7	3.3	0	1.5		0.3	0	0	2.5	0						
Fox Sparrow	2.3	0.9	0.3	2.1	4.3	0.4	2.2	0.3	1.7	0.4	0	3.7	0.2					1.3	
Song Sparrow																			

Adapted from a food preference study (Purple Martin News, Vol. 9, No. 10, Oct. 30, 1974)

Purple Martin News costs \$6 per year (12 issues) from Griggsville Wild Bird Society, Griggsville, Illinois 62340.

Adapted by Allan D. Smith. A handy guide to determine the likes and dislikes of your backyard visitors.

LAST YEAR'S ERROR COMES TO LIGHT!

We know now that readers don't check the Christmas Bird Counts very carefully, for no one ever mentioned that a year ago, in N.B. Naturalist Vol. 5, No. 1, we listed only half of the Mactaquac count. Right after Black-capped Chickadee it just terminated and the Fredericton count began the next page. To make amends, we now publish the entire Mactaquac report:

1973  
Mactaquac (2nd year) - Dec. 28; 8 am to 4:30 pm. Overcast, drizzle changing to hail and snow (3" accumulation); temp. 15°-22°; wind NW, 5-10 mph. Frozen ground, ice-covered and later on by 2" snow; large patches of open water above dam and completely open below. 7 observers in 4 parties. Tot. party-hours, 18 (4 on foot, 14 by car); tot. party-miles, 181 (8 on foot, 173 by car).  
Com. Goldeneye, 31; Com. Merganser, 48; Red-br. Merganser, 1; Great Black-backed Gull, 7; Herring Gull, 14; Rock Dove, 26; Hairy Woodpecker, 1; Grey Jay, 1; Blue Jay, 7; Raven, 30; Crow, 23; Black-capped Chickadee, 56; Horsal Chickadee, 1; Red-br. Nuthatch, 2; House Sparrow, 67; Evening Grosbeak, 1; Purple Finch, 8; Com. Redpoll, 58; Goldfinch, 1; Junco, 10; Tree Sparrow, 12; White-throated Sparrow, 5; Song Sparrow, 2. Total: 23 species, 412 birds. (Seen in count period: Black Duck, Robin, warbler sp.) Stephen Claydon, Anne Dean, Clifford Jones, Darrell Kitchen, Ed Pelger (compiler), Beverly Schneider, Marc Schneider.

SURVEY OF SPRING FLOWERS

To encourage a more active interest in plants, we are inaugurating a survey of bloom-dates of several common wildflowers. The species have been selected as ones that should be familiar to many people and common in a large portion or all of the province. The beginning of their blooming periods extends from early through late spring (probably early April to late May in southern N.B., late April to mid June in the north).

Most guides to wildflowers will help with identification of the herbaceous plants but we can especially recommend A Field Guide to the Wildflowers by Peterson and McKinney. Almost any book on trees will be sufficient for the woody species.

On the form attached, we would like you to report observations from a single locality only (within a 5-mile diameter circle). If you will be making observations more widely than that, please report on an additional piece of paper or write for more forms. In very hilly areas, please use separate forms if the altitude range of your observations is more than about 500 feet, for example "Alma (coastal)" and "Alma (above 500 ft.)". Additional forms can also be obtained for friends or students.

Recording your observations: There are two dates we are looking for - the date of the earliest blossom and the date when ten or more plants begin to flower. (They may or may not be in "full bloom" at that time.) It is envisioned that you will be able to report the exact dates for species you see every day or two. Others may be in a habitat or locality you can visit only at weekly intervals, such as at your camp or cottage. There, one may arrive on a Saturday, say May 17, to discover white violets in full bloom where there had been none the preceding Sunday. In that case, you should record the blooming dates as "between May 10-17" or "before May 17."

A third item requested relates to the slope of the ground where you find the flowers, since south-facing slopes will be more advanced than will level ground, etc. An interesting exercise would be to make separate reports for two or more different slopes at the same location. For instance, how much earlier do daisies bloom in the south-facing field near your home than in the north-facing field just down the road?

Best wishes for some interesting hours afield. If you need more information or forms, write the Natural Science Dept., N. B. Museum, 277 Douglas Avenue, Saint John.

WILD MOUNTAINS - FRAGILE SEAS

Mountains and seas - theme of the Canadian Nature Federation Conference to be held in Victoria, B.C. June 14 & 15; various field excursions organized for June 12, 13, 16 and 17. Write the C.N.F., 46 Elgin Street, Ottawa K1P 5K6, for further details. It should be a fascinating get-together.

WILDLIFE IN URBAN CANADA

A symposium on wildlife in urban Canada will offer workshops, panel discussions and special papers presented on the problems of wildlife in our growing urbanized areas. To be held at University of Guelph May 26-30. Write Office of Continuing Education, University of Guelph, Guelph, Ontario.



# WILDFLOWER BLOOMING DATES - SPRING 1975

Locality: \_\_\_\_\_

(Observations reported should fall  
within a 5-mile diameter circle.

Observer(s): \_\_\_\_\_

Address: \_\_\_\_\_

Species	Date of		* Slope	Notes
	Earliest Flower	10+ plants in bloom		
<u>Trees &amp; Shrubs</u>				
Speckled Alder				Record when catkins release yellow pollen
Alnus rugosa				
Trembling Aspen/Poplar				
Populus tremuloides				Straight, hanging catkins
White Elm				
Ulmus americana				
Bilberry/Shadbush				The one with copper- coloured leaves
Amelanchier laevis				
Pink/Red Cherry				
Prunus pennsylvanica				
Apple				
Pyrus malus				
Choke Cherry				
Prunus virginiana				
Rhodora				
Rhododendron canadense				
<u>Woodland Herbs</u>				
Dogtooth Violet				Also called Trout Lily
Erythronium americanum				
Red/Purple Trillium				
Trillium erectum				
White Violets				If able, please indicate which species you are reporting.
Viola incognita/V. pallens				
Blue/Purple Violet				
V. cucullata/V. septentrionalis				
Goldthread				
Coptis groenlandica				
Painted Trillium				
Trillium undulatum				
Canada Mayflower/				
Wild Lily-of-the-valley				Maianthemum canadense
Bunchberry				Report when petals of small central flowers open
Cornus canadensis				
Starflower				
Trientalis borealis				
<u>Open Country Herbs</u>				
Coltsfoot				Dandelion-like flower, but without green leaves
Tussilago farfara				
Dandelion				
Taraxacum officinale				
Strawberry				
Fragaria virginiana				
Yellow Rocket				
Barbarea vulgaris				
Tall Buttercup				
Ranunculus acris				
Oxeye Daisy				
Chrysanthemum leucanthemum				

\* For slope, indicate:  
L = more or less level ground  
S = marked south-facing slope  
W = west  
N = north  
E = east, etc.