



Here begins the New Brunswick Naturalist, a newsletter for all those interested in the natural history of the province. Six numbers per year are planned. Your notes and suggestions will be most welcome. Subscription will be \$1.00 per year.

CHRISTMAS BIRD COUNTS

What does a mild, snow-free early winter do to birds? It let's a lot of them remain in New Brunswick later than usual and it allows strays to survive until Christmas Count time. These were noticeable characteristics of our Bird Counts this winter, giving rise to a record number of species on several counts.

In the northern half of the province the ground generally was covered with snow but not deeply so, while in the south, snow was present for only a few days. The first real storm of the winter left deep snow on Dec. 19. Along the Bay of Fundy it was removed by rain on the 22nd. A second storm, beginning Dec. 26, turned to rain and the ground was bared across all of southern New Brunswick on the 27th. With little cold weather (mean December temp. about 6° above normal), the Saint John River was almost entirely ice-free for the Jemseg count, while there was much open water at Saint John and a bit at Fredericton. The mildness also meant very little ice on the sea at Cape Tormentine and other areas along the northeastern coast.

A record 24 Christmas Counts were taken this winter, including seven in northern New Brunswick, where there never have been more than two in one year before. All the counts lasted at least six hours except for one made at sea from the Grand Manan boat, where a longer count was impossible. All told, 205 participants observed for 387 party-hours (on foot and by car, boat, and snowmobile) and at 78 bird feeders and reported 59,213 birds of 104 species. An additional 5 species were seen during the Christmas count period.

Among the unusual species not normally with us in December were Pied-billed Grebes, Canada Geese (several counts), Ring-necked Ducks, Am. Coot, Killdeer, Yellow-bellied Sapsucker, Hermit Thrushes, Rusty Blackbirds, Chipping Sparrows and White-crowned Sparrows. Lingers more often with us included Great Blue Herons, Green-winged Teal, Hooded Merganser, Mourning Dove and Belted Kingfisher.

Regarding geese, it is interesting to note the background to their appearance on several Christmas Counts. Al Smith reports that goose numbers were high in all three Maritime Provinces this fall. Canadian Wildlife Service aerial surveys

in November spotted 27,796 in the Maritimes. In December when they normally record geese only along the south coast of Nova Scotia, the survey tallied 4100 geese in Prince Edward Island and 1560 along the north shore of Nova Scotia. Weather prevented an aerial survey of New Brunswick in December.

We do have relevant New Brunswick data supplied by Alan Madden who reports that Lorne Stymiest saw about 6000 geese at Bathurst on Dec. 13. About 2000 were in the sanctuary there, the remainder were flocks seen flying towards Tabusintac. The last geese at Bathurst were seen Dec. 24 (75-100) and Mr. Stymiest's brother noted a large concentration at Tabusintac on Dec. 20.

As these many geese around the Gulf of St. Lawrence finally moved out in late December they were seen on the bird counts.

A few birds seen fairly regularly in winter here were found in areas beyond their usual range, for example, Common Loon at Fredericton, Buffleheads at Dalhousie, Bathurst, Cape Tormentine, and Riverside-Albert, Common Scoters at Cape Tormentine, Ring-billed Gulls at Dalhousie, Brown Thrasher at Perth-Andover and E. Meadowlark at Shippegan Island.

Bohemian Waxwings were seen at Fredericton and Moncton, but it is doubtful that we will have another big invasion like last year.

After a very good fall for Dickcissels and Rufous-sided Towhees, both were found on the counts; 5 Dickcissels were at St. Andrews and 4 at Eastport-Campobello; 3 Towhees were at Fredericton. During the count period there were also 3 Towhees and 3 Dickcissels at Saint John and 3 Dickcissels at Fundy National Park.

Mice have been very common in southeastern New Brunswick this winter. As a result there have been some hawk concentrations: at Sackville, 33 Rough-legged Hawks; at Riverside-Albert, 10 Red-tailed Hawks, 6 Rough-legs and 2 Marsh Hawks.

With respect to our usual water birds, very few Purple Sandpipers were recorded this year (perhaps just a coincidence) while Black Ducks, Buffleheads, Common Mergansers, and Iceland (note record 476 at Shippegan), Great Black-backed and Herring Gulls all seemed to be more common than usual.

Amongst landbirds, Hairy and Downy Woodpeckers, Blue Jay, House Sparrow, Common Grackle, and White-throated (record 25 at Saint John), Fox and Song Sparrows were recorded in higher than usual numbers. Golden-crowned Kinglet numbers were very low this year while Black-capped and Boreal Chickadees, Red-breasted Nuthatch, Brown Creeper, and Slate-coloured Junco were lower than average.

It was a high year for Common Redpolls (though only about half 1968's numbers) and White-winged Crossbills (mainly southeastern N.B.). Evening Grosbeaks were about average and the remainder of the finches were more or less scarce.

Snow Buntings and Northern Shrikes were, respectively, below average and average in southern New Brunswick, but both appear decidedly more common in the north. It will be a number of years before we have enough information from northern New Brunswick to make any statements about what the usual species and

numbers are there. It is, therefore, most pleasing to have such a good number of northern counts submitted this winter. If they continue we will learn much about birds there, as we have during the last ten years in the south.

NEW BRUNSWICK-DEC. 20, 1969 TO JAN. 1, 1970

Note

The following abbreviations have been used:

- * record high for the province
- ** first time on a provincial count
- 454 record high for the area
- Robin first time for that area

(Underlining is used only for areas where at least 4 counts have been made)

Perth-Andover - Dec. 30; 8 a.m. to 5 p.m.; sunny & cold; temp. 15°; wind NW, 10 mph; 15" packed, crusted snow; water frozen; 2 observers in 1 party. Total party hours, 9; total party miles 13 (3 on foot, 10 by car).
Ruffed Grouse, 1; Rock Dove, 20; Hairy Woodpecker, 1; Blue Jay 20; Common Raven, 40; Common Crow, 11; Black-capped Chickadee, 30; Boreal Chickadee, 5; Brown Thrasher, 1; Starling, 4; House Sparrow, 25; Common Redpoll, 15; White-winged Crossbill, 15; Slate-coloured Junco, 20; Tree Sparrow, 6; White-throated Sparrow, 1; Snow Bunting, 25. Total species 17, about 240 birds. (Seen in count period, Goshawk, Downy Woodpecker, Red-breasted Nuthatch, Evening Grosbeak). Gordon C. Cook, Murray E. Watters (compiler).

Blackville - Dec. 25; 10 a.m. to 7 p.m.; cloudy, becoming snowy; temp. 30°; wind NE, 20 mph; ground almost bare of snow; 1 observer. Total party hours, 8 (6 on foot, 2 by car); total party miles 25 (6 on foot, 19 by car).
Canada Goose, 400*; Common Goldeneye, 5; Cooper's Hawk, 1 (no details submitted); Sharp-shinned Hawk, 2; Spruce Grouse, 7*; Ruffed Grouse, 5; Great Horned Owl, 1; Snowy Owl, 1; Barred Owl, 2*; Pileated Woodpecker, 1; Hairy Woodpecker, 2; Downy Woodpecker, 1; Gray Jay, 10; Blue Jay, 7; Common Raven, 12; Common Crow, 3; Black-capped Chickadee, 7; Red-breasted Nuthatch, 1; Brown Creeper, 1; Golden-crowned Kinglet, 2; Northern Shrike, 1; Starling, 2; House Sparrow, 3; Evening Grosbeak, 7; Pine Grosbeak, 15; Snow Bunting, 11. Total species 26, about 510 birds. Norman S. Stewart (compiler).

Woodstock - Dec. 29; 8.40 a.m. to 3.40 p.m.; cloudy & cold; temp. 30°; wind 25 to 50 mph, very gusty; little snow (bare patches); streams & rivers frozen; 5 observers in 2 parties; 5 at feeders. Total party hours, 7½ (3¼ on foot, 6¾ by car); total party miles 132 (1 on foot, 131 by car).
Rock Dove, 105; Hairy Woodpecker, 3; Downy Woodpecker, 4; Blue Jay, 7; Common Raven, 19; Common Crow, 70; Black-capped Chickadee, 21; White-breasted Nuthatch, 5; Robin, 2; Northern Shrike, 1; Starling, 90; House Sparrow, 483; Brown-headed Cowbird, 14; Evening Grosbeak, 13; Pine Grosbeak, 23; Common Redpoll, 20; American Goldfinch, 30; Tree Sparrow, 2; Snow Bunting, 1. Total species 19, about 913 birds. (Seen in count period, hawk sp., Hairy Woodpecker, Common Grackle, Slate-coloured Junco). Mrs. Lucy Dyer, Mrs. David Fry, Ken Homer, Stephen Homer, Murray Hubbard, Mrs. Rowena MacDonald, Miss Jane Speer (compiler), Mrs. Robert Speer, Mrs. Cecil Stewart, Mrs. Charles Webb.

Fredericton - Dec. 26; 8 a.m. to 4 p.m.; clear, snow storm late P.M.; temp. 2°-22°; wind NE, 6-30 mph; 1 foot snow, water 95% frozen; 15 observers in 12 parties; 12 at feeders. Total party hours, 48½ (18 ¾ on foot, 29½ by car); total party miles 328 (42 on foot, 286 by car).

Common Loon, 1; Common Goldeneye, 9; Barrow's Goldeneye, 1; Ruffed Grouse, 1; Ring-necked Pheasant, 2; Herring Gull, 3; Rock Dove, 687; Hairy Woodpecker, 25; Downy Woodpecker, 29; Gray Jay, 13; Blue Jay, 193; Common Raven, 121; Common Crow, 180; Black-capped Chickadee, 166; Boreal Chickadee, 8; White-breasted Nuthatch, 8; Red-breasted Nuthatch, 6; Brown Creeper, 1; Robin, 16; Bohemian Waxwing, 6; Northern Shrike, 2; Starling, 2367; House Sparrow, 3404; Baltimore Oriole, 1; Rusty Blackbird, 1; Common Grackle, 18; Brown-headed Cowbird, 5; Evening Grosbeak, 176; Pine Grosbeak, 1; Common Redpoll, 249; Pine Siskin, 11; American Goldfinch, 5; Red Crossbill, 1; White-winged Crossbill, 8; Finches sp., 4; Rufous-sided Towhee, 3; Slate-coloured Junco, 56; Tree Sparrow, 73; White-crowned Sparrow, 1; White-throated Sparrow, 1; Song Sparrow, 5; Snow Bunting, 31. Total species 41, about 7899 birds. (Seen in count period, Bald Eagle, Great Black-backed Gull, Hermit Thrush). Mrs. M. Acheson, B. Bartlett, W. Bauer, Dr. G. Clayden, J. Clayden, S. Clayden, A.A. Dean (compiler), A.G. Dean, Miss A.M. Dean, Miss L.M. Dean, H. Deichmann, T. Dilworth, D. Fowler, K. Fowler, H. Krause, Miss J. LeBlanc, Mrs. W.R.D. McNeill, M. Moore, Miss N. Moore, A. Morais, D. Noble, D.K. Parr, K. Pitcairn, W.A. Squires, Mrs. W.A. Squires, A. Varty, I.W. Varty.

Jemseg - Dec. 20; 8.15 a.m. to 5.00 p.m.; overcast a.m., 20% clear by late p.m.; temp. 30°-26°; wind W, 10-15 mph; 11" fresh snow, most freshwater open; 8 observers in 4 parties; 2 at feeders. Total party hours, 18½ (2 on foot, 16½ by car); total party miles 180 (3 on foot, 177 by car).

Black Duck, 1; Common Goldeneye, 30; Common Merganser, 15; Rough-legged Hawk, 2; Ruffed Grouse, 3; Herring Gull, 6; Rock Dove, 3; Hairy Woodpecker, 5; Downy Woodpecker, 5; Gray Jay, 4; Blue Jay, 26; Common Raven, 14; Common Crow, 8; Black-capped Chickadee, 45; Boreal Chickadee, 3; White-breasted Nuthatch, 2; Robin, 1; Starling, 13; House Sparrow, 263; Red-winged Blackbird, 1; Brown-headed Cowbird, 3; Pine Grosbeak, 11; Common Redpoll, 55; Slate-coloured Junco, 17; Tree Sparrow, 55; White-throated Sparrow, 7; Song Sparrow, 5; Snow Bunting, 85; birds sp., 4. Total species 28, about 692 birds. (Seen in count period, Great Black-backed Gull). H. Deichmann, M. Moore, D.K. Parr, P.A. Pearce (compiler), Dr. & Mrs. W.A. Squires.

McAdam - Dec. 27; 10.00 a.m. to 4.00 p.m.; clear & cool; temp. 22°; wind W, 5-10 mph; little snow, ground frozen; 2 observers in 1 party; 1 at feeder. Total party hours, 6 (2 on foot, 4 by car); total party miles 20 (3 on foot, 17 by car).

Bald Eagle, 1; Ruffed Grouse, 2; Hairy Woodpecker, 6; Downy Woodpecker, 4; Gray Jay, 1; Blue Jay, 10; Common Raven, 17; Common Crow, 6; Black-capped Chickadee, 5; White-breasted Nuthatch, 1; Robin, 2; Starling, 3; Red-winged Blackbird, 10; Evening Grosbeak, 7; Pine Grosbeak, 3; Common Redpoll, 2; Tree Sparrow, 1. Total species, 17, about 81 birds. J.W. Sangster, Jr., J.W. Sangster, Sr. (compiler).

Dalhousie - Dec. 20; 9.50 a.m. to 4.00 p.m.; heavy overcast, snowed 10.00 to 12.00; temp. 20°; wind 20 mph; light snow cover, depth 6"; salt water 80% open; 2 observers in 1 party. Total party hours, 6 (1 on foot, 5 by car); total party miles 39 (3 on foot, 36 by car).

Canada Goose, 50; Common Goldeneye, 115; Barrow's Goldeneye, 3; Bufflehead, 4; Red-breasted Merganser, 2; Glaucous Gull, 1; Great Black-backed Gull, 50; Herring Gull, 63; Ring-billed Gull, 50; Gulls sp., 128; Black Guillemot, 1; Rock Dove, 4;

Hairy Woodpecker, 1; Blue Jay, 9; Common Raven, 3; Common Crow, 1; Black-capped Chickadee, 12; Boreal Chickadee, 1; Golden-crowned Kinglet, 2; House Sparrow, 80; Brown-headed Cowbird, 50; Common Redpoll, 80; Snow Bunting, 200. Total species, 22, about 910 birds. Alan Madden (compiler), Annette Madden.

Jacquet River - Dec. 30; 9 a.m. to 4.15 p.m.; cold & clear; temp. 12°-14°; wind NW, 20 mph; freshwater frozen, little snow in most places & hard; 1 observer. Total party hours, 6½ (5 ¾ on foot, ½ by car); total party miles 15 (8 on foot, 7 by car). Common Goldeneye, 14; Oldsquaw, 50; Common Merganser, 8; Iceland Gull, 11; Great Black-backed Gull, 5; Herring Gull, 16; Black Guillemot, 2; Rock Dove, 8; Blue Jay, 2; Common Raven, 7; Common Crow, 2; Black-capped Chickadee, 3; Boreal Chickadee, 1; Golden-crowned Kinglet, 3; Northern Shrike, 1; Starling, 7; House Sparrow, 10; Common Redpoll, 9; Total species 18, about 159 birds. (Seen in count period, Red-breasted Merganser, Pine Grosbeak, Slate-coloured Junco, Snow Bunting). Fr. Jean-Paul Lebel (compiler).

Bathurst, - Dec. 31; 8 a.m. to 4.30 p.m.; clear sky, sunny all day; temp. 30°; wind 10 mph; ground covered by one foot of snow, salt water extremely rough; 2 observers in 1 party. Total party hours, 8½ (7½ on foot, 1 by car); total party miles 25 (10 on foot, 15 by car).

Bufflehead, 3; ducks sp., 200 (probably Surf Scoters); Common Merganser, 24; Great Black-backed Gull, 75; Herring Gull, 15; Black Guillemot, 2; Rock Dove, 38; Hairy Woodpecker, 4; Blue Jay, 4; Common Crow, 14; Black-capped Chickadee, 21; Red-breasted Nuthatch, 2; Starling, 94; House Sparrow, 124; Evening Grosbeak, 4; Pine Grosbeak, 6; Common Redpoll, 15; Slate-coloured Junco, 1; Snow Bunting, 50. Total species, 19, about 696 birds. (Seen in count period, Canada Goose). Ronald Godin (compiler), Fr. Florence LeBreton.

Shippagan Island - Dec. 26; 8.15 a.m. to 3.45 p.m.; Sunny, cloudy, light snow; temp. 8°-20°; wind 0-10 mph; ground covered by snow, water partly frozen; 2 observers in 1 party. Total party hours, 7½; total party miles 104 (1 on foot, 103 by car). Common Goldeneye, 30; Oldsquaw, 4; Common Eider, 3; Common Merganser, 1; ducks sp., 26; Iceland Gull, 476*; Great Black-backed Gull, 122; Herring Gull, 66; Rock Dove, 18; Blue Jay, 4; Common Raven, 9; Common Crow, 30; Black-capped Chickadee, 1; Northern Shrike, 3; Starling, 298; House Sparrow, 69; Eastern Meadowlark, 1; Common Redpoll, 65; Snow Bunting, 52. Total species, 19, about 1278 birds. (Seen in count period, Spruce Grouse). Hilaire Chiasson (compiler), Mlle. Rose-Aline Hache.

Kouchibouguac National Park - Jan. 1; 9.15 a.m. to 4.30 p.m.; clear; temp. 8°-20°; wind NW, 0-15 mph; bare ground in open, crusted snow in woods, lagoons and rivers frozen; 4 observers in 1 party. Total party hours, 7½ (2 on foot, 5½ by car); total party miles 102 (2 on foot, 100 by car). Black Duck, 50; Oldsquaw, 38; Red-breasted Merganser, 1; ducks sp., 30; Great Black-backed Gull, 43; Herring Gull, 99; Rock Dove, 7; Gray Jay, 6; Blue Jay, 4; Common Raven, 181*; Black-capped Chickadee, 7; Boreal Chickadee, 8; Brown Creeper, 1; Golden-crowned Kinglet, 1; Northern Shrike, 3; Starling, 15; House Sparrow, 298; Pine Grosbeak, 1; Common Redpoll, 41; Red Crossbill, 2; White-winged Crossbill, 1; finches sp., 13; Snow Bunting, 192; bird sp., 2. Total species, 21, about 1044 birds). David Christie (compiler), Chris Majka, Mary Majka, Dr. M. Majka.

Cape Tormentine - Dec. 22; 8.00 a.m. to 4.00 p.m.; overcast with snow flurries a.m. intermittent rain p.m.; temp. 25°-35°; wind NW, 10-15 mph; 2-6" snow on ground; fresh water frozen, salt water open; 3 observers in 2-3 parties. Total party hours, 13 (6 on foot, 7 by car); total party miles 101 (9 on foot, 92 by car).

Common Goldeneye, 14; Bufflehead, 1; Oldsquaw, 60; Common Eider, 4; Common Scoter, 6; Hooded Merganser, 1; Red-breasted Merganser, 5; diving ducks sp., 200; Rough-legged Hawk, 1; Glaucous Gull, 12; Iceland Gull, 151; Great Black-backed Gull, 53; Herring Gull, 135; Ring-billed Gull, 62*; Black-headed Gull, 1; Rock Dove, 2; Blue Jay, 30; Common Raven, 15; Common Crow, 23; Black-capped Chickadee, 19; Boreal Chickadee, 6; Robin, 1; Northern Shrike, 2; Starling, 4; House Sparrow, 136; Evening Grosbeak, 14; Pine Grosbeak, 38; Common Redpoll, 132; White-winged Crossbill, 28; Slate-coloured Junco, 4; Tree Sparrow, 13; Song Sparrow, 2; Snow Bunting, 151; fringillids sp., 6. Total species 32, about 1332 birds. Ron Hounsell, Al Smith (compiler), Jon Van Zoost.

Moncton - Dec. 26; 8 a.m. to 5 p.m.; clear a.m., overcast p.m.; temp. 15°-25°; wind 0-10 mph; 2" snow on ground, brooks flowing; 17 observers in 8 parties; 3 at feeders. Total party hours, 53 (40 on foot, 13 by car); total party miles 257 (28 on foot, 229 by car).

Black Duck, 20; diving ducks sp., 6; Goshawk, 1; Red-tailed Hawk, 1; Rough-legged Hawk, 1; Ruffed Grouse, 9; Ring-necked Pheasant, 13; Iceland Gull, 39; Great Black-backed Gull, 363; Herring Gull, 1334; Ring-billed Gull, 1; Rock Dove, 199; Hairy Woodpecker, 10; Downy Woodpecker, 8; Gray Jay, 5; Blue Jay, 165; Common Raven, 146; Common Crow, 64; Black-capped Chickadee, 94; Boreal Chickadee, 10; White-breasted Nuthatch, 2; Red-breasted Nuthatch, 2; Robin, 6; Golden-crowned Kinglet, 6; Bohemian Waxwing, 14; Starling, 575; House Sparrow, 1958; Common Grackle, 3; Evening Grosbeak, 58; Purple Finch, 10; Pine Grosbeak, 90; Common Redpoll, 305; Pine Siskin, 30; American Goldfinch, 1; White-winged Crossbill, 16; Slate-coloured Junco, 48; Tree Sparrow, 26; White-throated Sparrow, 1; Song Sparrow, 2; Snow Bunting, 6. Total species 40, about 5648 birds. (Seen in count period, Cooper's Hawk**, Pileated Woodpecker, Redwinged Blackbird). Mrs. R.R. Brown, Peter Cook, Donald Cormier, Mr. & Mrs. Henry Cormier, Sylvio Cormier, Dr. & Mrs. Arthur Dobson, Mr. & Mrs. John A. Fraser, Mrs. Marguerite Hope, Fred Lloyd, Reid McManus, Mr. & Mrs. Alan Madden, Chris Hajka, Mark Hajka, Dr. & Mrs. M. Hajka, Doug Whitman (compiler), Rick Whitman.

Sackville - Dec. 21; 7.30 a.m. to 4.30 p.m.; mostly sunny; temp. 15°-22°; wind NW, 5-10 mph; snow cover, most fresh water frozen, salt water open; 7 observers in 6 parties; 8 at feeders. Total party hours, 31 (21½ on foot, 4 by ski-doo, 5½ by car); total party miles 159 (26½ on foot, 10½ by ski-doo, 122 by car).

Great Blue Heron, 1; Canada Goose, 1; Black Duck, 134; Green-winged Teal, 1; Common Merganser, 35; Sharp-shinned Hawk, 1; Rough-legged Hawk, 33; Bald Eagle, 1; Sparrow Hawk, 1; hawk sp., 1; Ruffed Grouse, 1; Ring-necked Pheasant, 28; Great Black-backed Gull, 19; Herring Gull, 237; Rock Dove, 72; Snowy Owl, 1; Hairy Woodpecker, 4; Downy Woodpecker, 6; Horned Lark, 7; Gray Jay, 2; Blue Jay, 55; Common Raven, 111; Common Crow, 42; Black-capped Chickadee, 37; Boreal Chickadee, 10; White-breasted Nuthatch, 5; Robin, 2; Golden-crowned Kinglet, 1; Starling, 252; House Sparrow, 547; Red-winged Blackbird, 1; Common Grackle, 12; Brown-headed Cowbird, 3; Evening Grosbeak, 15; Pine Grosbeak, 20; Common Redpoll, 160; White-winged Crossbill, 41; Slate-coloured Junco, 16; Tree Sparrow, 13; White-throated Sparrow, 1; Fox Sparrow, 1; Lapland Longspur, 2; Snow Bunting, 40; song birds sp., 82. Total species 43, about 2057 birds. Bill Black, Mrs. H. Burke, Gordon Burns, Mrs. Roger Calkins, John Clark, Paul Dean, Hinrich Harries, Mrs. L.P. Harris, Reid McManus, Mrs. D. McPhail, Ted Pulford, Mrs. A.J. Smith, Al Smith (compiler), Jon Van Zoost.

Riverside-Albert - Dec. 31; 8 a.m. to 5 p.m.; clear; temp. 10°-25°; wind 0-3 mph; ground bare, running water open; 14 observers in 4 parties; 3 at feeders. Total party hours 27 (11 on foot, 16 by car); total party miles 160 (12 on foot, 148 by car).

Red-throated Loon, 26*; Great Blue Heron, 1; Black Duck, 409; Common Goldeneye, 39; Dufflehead, 1; Red-breasted Merganser, 5; duck sp., 60; Goshawk, 1; Red-tailed Hawk, 10*; Rough-legged Hawk, 6; Marsh Hawk, 2; Ruffed Grouse, 3; Purple Sandpiper, 45; Glaucous Gull, 1; Iceland Gull, 17; Great Black-backed Gull, 7; Herring Gull, 40; gulls sp., 30; Mourning Dove, 1; Hairy Woodpecker, 1; Downy Woodpecker, 9; Gray Jay, 27*; Blue Jay, 64; Common Raven, 54; Common Crow, 18; Black-capped Chickadee, 20; Boreal Chickadee, 20; Red-breasted Nuthatch, 4; Brown Creeper, 1; Robin, 3; Golden-crowned Kinglet, 7; Northern Shrike, 1; Starling, 404; House Sparrow, 191; Common Grackle, 4; Brown-headed Cowbird, 2; Evening Grosbeak, 6; Pine Grosbeak, 26; Common Redpoll, 260; Pine Siskin, 10; Am. Goldfinch, 1; Red Crossbill, 6; White-winged Crossbill, 43; Slate-coloured Junco, 4; Tree Sparrow, 8; White-throated Sparrow, 5; Fox Sparrow, 3; Song Sparrow, 7; Lapland Longspur, 25*; Snow Bunting, 51; birds sp., 57. Total species 48, about 2046 birds. (Seen in count periods: Canada Goose, Sharp-shinned Hawk, Ring-necked Pheasant.) David Alward, Ford Alward (compiler), Mark Alward, David Christie, Reginald Duffy, Sue Fullerton, Alan Madden, Annette Madden, Chris Majka, Mark Majka, Mary Majka, Dr. H. Majka, Thomas Norman, James Quinn, Dale Tingley, Billy White, Mrs. Percy Wilbur.

Fundy National Park - Dec.20; 7 a.m. to 4:45 p.m. Snow flurries in a.m., overcast p.m.; temp. 32° to 25°; wind W, 5-15 m.p.h. Fresh, heavy snow (6" at coast, 15" inland), freshwater frozen. 4 observers in 2 parties; total party-hours, 11 (7 on foot, 4 by car); total party-miles, 78 (7 on foot, 71 by car).

Red-throated Loon, 3; Great Blue Heron, 1; Canada Goose, 34; Black Duck, 8; Common Goldeneye, 6; Goshawk, 2; Red-tailed Hawk, 2; Ruffed Grouse, 2; Great Black-backed Gull, 2; Herring Gull, 26; Downy Woodpecker, 2; Horned Lark, 5; Gray Jay, 9; Blue Jay, 10; Common Raven, 8; Common Crow, 2; Black-capped Chickadee, 13; Boreal Chickadee, 7; White-breasted Nuthatch, 1; Brown Creeper, 1; Robin, 1; Golden-crowned Kinglet, 4; Northern Shrike, 1; Starling, 30; House Sparrow, 50; Common Grackle, 3; Brown-headed Cowbird, 2; Common Redpoll, 2; White-winged Crossbill, 10; Slate-colored Junco, 2; White-throated Sparrow, 4; Fox Sparrow, 1; Song Sparrow, 2; Snow Bunting, 18. Total species 34, about 274 birds. (Seen in count periods: Hairy Woodpecker, Red-breasted Nuthatch, Dickcissel.) David Christie (compiler), Chris Majka, Mary Majka, Roger Roy.

St. Martins - Dec.28; 9 a.m. to 3:30 p.m. Fog, light mist, occasional drizzle; temp. 42°; wind SE, 10 m.p.h. Ground muddy; freshwater partly frozen. 2 observers in 2 parties, 2 at feeders. Total party-hours, 8½ (6½ on foot, 2 by car); total party-miles, 29 (9 on foot, 20 by car).

Black Duck, 36; Common Goldeneye, 5; Ruffed Grouse, 2; Glaucous Gull, 2; Great Black-backed Gull, 6; Herring Gull, 61; Ring-billed Gull, 4; Yellow-bellied Sapsucker, 4*; Hairy Woodpecker, 1; woodpecker sp., 1; Gray Jay, 8; Blue Jay, 3; Common Raven, 5; Common Crow, 12; Black-capped Chickadee, 1; Boreal Chickadee, 12; Red-breasted Nuthatch, 1; Brown Creeper, 1; Robin, 1; Starling, 3; House Sparrow, 6; Common Grackle, 20; Brown-headed Cowbird, 14; Evening Grosbeak, 3; Purple Finch, 5; Common Redpoll, 20; Pine Siskin, 2; Am. Goldfinch, 8; White-winged Crossbill, 2; Tree Sparrow, 4; White-throated Sparrow, 1; Fox Sparrow, 1; Song Sparrow, 1; birds sp., 6. Total species 32, about 262 birds. (Seen in count periods: Purple Sandpiper.) Frances Bradshaw (compiler), Jim Bradshaw, Stuart Duncan, Eva Harper.

Saint John - Dec.27; 6:45 a.m. to 4:30 p.m. Overcast with showers and drizzle; temp. 35° to 49°; wind E, 30 m.p.h., gusting regularly to 50. Scattered patches of snow; lakes frozen, numerous open areas in rivers. 15 observers in 9 parties; 30 at feeders. Total party-hours, 42½ (20½ on foot, 22 by car); total party-miles, 280 (15 on foot, 265 by car).

Pied-billed Grebe, 3**; Great Cormorant, 6; Canada Goose, 50; Mallard, 1; Black Duck, 266; Green-winged Teal, 1; Ring-necked Duck, 20*; Common Goldeneye, 262; Bufflehead, 27; Common Scoter, 6; Common Merganser, 42*; Red-breasted Merganser, 4; ducks sp., 8; Sharp-shinned Hawk, 1; Ruffed Grouse, 1; Glaucous Gull, 4; Iceland Gull, 45; Great Black-backed Gull, 1312; Herring Gull, 5690; Ring-billed Gull, 3; Black-headed Gull, 2; Rock Dove, 154; Hairy Woodpecker, 9; Downy Woodpecker, 18; Gray Jay, 2; Blue Jay, 20; Common Raven, 62; Common Crow, 107; Black-capped Chickadee, 134; Boreal Chickadee, 12; White-breasted Nuthatch, 1; Red-breasted Nuthatch, 5; Brown Creeper, 1; Robin, 4; Golden-crowned Kinglet, 6; Starling, 472; House Sparrow, 511; Red-winged Blackbird, 2; Common Grackle, 6; Brown-headed Cowbird, 30; Evening Grosbeak, 20; Pine Grosbeak, 15; Common Redpoll, 10; Pine Siskin, 13; Slate-coloured Junco, 20; Tree Sparrow, 11; White-crowned Sparrow, 2*; White-throated Sparrow, 25*; Fox Sparrow, 7; Song Sparrow, 6; birds sp., 100. Total species 49, about 9539 birds. (Seen in count period, Common Loon, Great Blue Heron, Goshawk, Killdeer, Northern Shrike, Dickcissel, Red Crossbill, White-winged Crossbill, Rufous-sided Towhee, Snow Bunting). Mrs. A.R. Abell, Mrs. G.G. Anglin, Fred Brock, Helen Brown, Mrs. C.H. Cameron, Rosamond Campbell, Mrs. S. Cathline, David Christie, (compiler), Florence Christie, David Clark, Greta Clark, Shirley Colquette, Mrs. R.A. Cowan, Mrs. E.J. Cram, Henrik Deichmann, Janet Dexter, Mrs. M.J. Duffy, Eldon Fletcher, Mrs. J.A. Gillies, W.C. Godard, Joyce Golden, Irene Gorham, Stanley Gorham, Mrs. A.R. Goucher, Frances Hayes, Grace Hayes, Joan Henry, Mrs. G.L. Hunter, Cecil Johnston, Mrs. Charles Laskey, Mrs. G.E. Logan, Mrs. W.R. Mathers, Bill O'Brien, Mr. & Mrs. R.G. Pearce, Gordon Redstone, Mary Ross, Marion Sherwood, Mrs. W.J. Simon, Carle Smith, David F. Smith, Ray Tanton, Ian Trenwith, Alice Watters, Jim Wilson, Wilfred Wood.

Lepreau - Dec. 28; 7.30 a.m. to 5.10 p.m.; clear a.m.; overcast p.m.; fog in early a.m.; temp. 42°-50°; wind W, 0-5 mph; ground bare, lakes frozen, rivers open; 7 observers in 2-3 parties; 1 at feeder. Total party hours 17½ (4½ on foot, 13 by car); total party miles 96½ (5½ on foot, 91 by car). Common Loon, 9; Red-throated Loon, 5; Red-necked Grebe, 15; Horned Grebe, 31; Great Cormorant, 7; Canada Goose, 2; Black Duck, 131; Common Goldeneye, 84; Bufflehead, 103; Oldsquaw, 30; Common Eider, 197; White-winged Scoter, 3; Surf Scoter, 6; Common Scoter, 37; Red-breasted Merganser, 23; duck sp., 1; Sharp-shinned Hawk, 1; Bald Eagle, 1; Marsh Hawk, 1; Glaucous Gull, 1; Iceland Gull, 2; Great Black-backed Gull, 57; Herring Gull, 545; Black-legged Kittiwake, 13; Razorbill, 6; Dovekie, 1; Hairy Woodpecker, 1; Downy Woodpecker, 1; Gray Jay, 9; Common Raven, 61; Common Crow, 126; Black-capped Chickadee, 4; Boreal Chickadee, 8; Red-breasted Nuthatch, 5; Brown Creeper, 1; Robin, 1; Northern Shrike, 1; Starling, 86; House Sparrow, 8; Common Grackle, 2; Pine Grosbeak, 7; Common Redpoll, 60; Red Crossbill, 4; White-winged Crossbill, 14; Tree Sparrow, 13; Swamp Sparrow, 1; Sparrow sp., 1; bird sp., 2. Total species 45, about 1728 birds. Arthur Callaghan, David Christie (compiler), John L. Holman, Cecil Johnston, Chris Majka, Mary Majka, Dr. M. Majka, Jim Wilson.

Pennfield-Beaver Harbour - Dec. 26; 7.45 a.m. to 3 p.m.; overcast; temp. 16°; wind E, 5 mph; ground bare; 3 observers in 2 parties. Total party hours 9 (2 on foot, 7 by car); total party miles 17 (2 on foot, 15 by car). Mallard, 10*; Bufflehead, 23; Common Eider, 10; Great Black-backed Gull, 14; Herring Gull, 330; Hairy Woodpecker, 2; Downy Woodpecker, 4; Blue Jay, 5; Common Raven, 1; Common Crow, 50; Black-capped Chickadee, 15; Red-breasted Nuthatch, 3; Robin, 1; Starling, 46; House Sparrow, 72; Tree Sparrow, 3; Field Sparrow, 3 (no details submitted); White-throated Sparrow, 3; Fox Sparrow, 1; Swamp Sparrow, 3 (no details submitted); Song Sparrow, 2. Total species 21, about 601 birds. Seen in count

period, Black Duck, Common Goldeneye, Red-tailed Hawk, Ruffed Grouse, Hermit Thrush, Common Grackle. C.A. Morehouse, Mr. & Mrs. H.C. Morehouse.

St. Andrews - Dec. 26; 8 a.m. to 3.30 p.m.; heavy clouds; temp. 16°; calm; ground bare, freshwater frozen, tidal waters open; 8 observers in 4 parties; 9 at feeders. Total party hours 22½; total party miles 183 ½ (4½ on foot, 179 by car). Common Loon, 2; Horned Grebe, 1; Great Cormorant, 1; Mallard, 2; Black Duck, 90; Greater Scaup, 64; Common Goldeneye, 5; Bufflehead, 46; White-winged Scoter, 13; Surf Scoter, 123; Common Merganser, 1; Red-breasted Merganser, 3; Great Black-backed Gull, 67; Herring Gull, 290; Rock Dove, 75; Hairy Woodpecker, 6; Downy Woodpecker, 12; Gray Jay, 5; Blue Jay, 48; Common Raven, 2; Common Crow, 111; Black-capped Chickadee, 98; Boreal Chickadee, 5; White-breasted Nuthatch, 1; Red-breasted Nuthatch, 1; Brown Thrasher, 1; Robin, 8; Ruby-crowned Kinglet, 1; Starling, 229; House Sparrow, 164; Baltimore Oriole, 3*; Common Grackle, 5; Brown-headed Cowbird, 12; Dickcissel, 5*; Evening Grosbeak, 47; Pine Grosbeak, 4; Common Redpoll, 800; Pine Siskin, 49; American Goldfinch, 64; Slate-coloured Junco, 17; Tree Sparrow, 10; Chipping Sparrow, 55 (no details submitted); White-throated Sparrow, 12; Fox Sparrow, 1; Swamp Sparrow, 1; Song Sparrow, 8; Snow Bunting, 12. Total species 47, about 2580 birds. (Seen in count period, Oldsquaw, Common Eider, Common Scoter, Purple Sandpiper, Brown Creeper, Rusty Blackbird, Purple Finch, White-winged Crossbill). Mrs. Hollis Bartlett, Miss Jacqueline Davis, Mrs. Ann Hall, Mrs. Donald Johnson, Miss H.W. MacCoubrey (compiler), Miss Mabelle MacCoubrey, Mr. & Mrs. Norman Mais, Miss Georgie Mears, Mrs. Fred Nutter, Mr. & Mrs. Gordon Perry, Dr. J.E. Rigby (compiler), Mrs. Donald Ross, Dr. & Mrs. Richard Saunders, Mrs. Spaulding, Dr. Albert Tyler, Mr. & Mrs. David Walker.

Eastport-Campobello - Dec. 23; 7 a.m. to 4 p.m. 5/10 cloudy; temp. 32°; wind NW, 15 m.p.h. Ground bare; salt and fresh water open. 2 observers in 2 parties; 1 at feeders. Total party-hours, 9 (½ on foot, 7½ by car, 1 by boat); total party-miles, 110 (2 on foot, 101 by car, 7 by boat). Common Loon, 8; Horned Grebe, 15; Great Cormorant, 24; Mallard, 2; Black Duck, 458*; Greater Scaup, 8; Common Goldeneye, 51; Bufflehead, 377*; Oldsquaw, 454; Common Eider, 8; White-winged Scoter, 12; Common Merganser, 13; Red-breasted Merganser, 13; Red-tailed Hawk, 2; Bald Eagle, 2; Sparrow Hawk, 1; Ruffed Grouse, 2; Glaucous Gull, 5; Iceland Gull, 11; Great Black-backed Gull, 276; Herring Gull, 2858; Ring-billed Gull, 19; Black-headed Gull, 3; Bonaparte's Gull, 197*; Black-legged Kittiwake, 6323; Thick-billed Murre, 2; Dovekie, 12; Black Guillemot, 1; Common Puffin, 2*; Hairy Woodpecker, 1; Blue Jay, 6; Common Raven, 41; Common Crow, 80; Black-capped Chickadee, 10; Boreal Chickadee, 2; Robin, 6; Northern Shrike, 1; Starling, 49; House Sparrow, 117; Baltimore Oriole, 1; Common Grackle, 11; Brown-headed Cowbird, 26; Dickcissel, 4; Common Redpoll, 37; White-winged Crossbill, 12; Slate-coloured Junco, 5; Tree Sparrow, 9; Song Sparrow, 1; Total species 48, about 11,578 birds. Rev. Charles Dorchester, William Townsend (compiler).

Grand Manan - Dec. 26; 8.00 a.m. to 4.30 p.m.; overcast - blizzard starting at 3.00 p.m.; temp. 22°-28°; wind SE-E, 20-50 mph; ground bare to 3.00 p.m., light snowing covering to 4.30 p.m.; freshwater frozen; 1 observer; 1 at feeder. Total party hours 8½ (1 on foot, 7½ by car); total party miles 67 (1 on foot, 66 by car). Common Loon, 2; Red-throated Loon, 1; Horned Grebe, 6; Great Cormorant, 63*; Canada Goose, 31; Black Duck, 46; Greater Scaup, 6; Common Goldeneye, 12; Bufflehead, 21; Oldsquaw, 5; Common Eider, 8; Surf Scoter, 1; Red-breasted Merganser, 29; Rough-legged Hawk, 1; Bald Eagle, 1; Pigeon Hawk, 1; Purple Sandpiper, 8; Great Black-backed Gull, 780; Herring Gull, 5,600; Black-legged Kittiwake, 60; alcids sp., 17; Dovekie, 9; Black Guillemot, 3; Rock Dove, 1; Downy Woodpecker, 1; Blue Jay, 16;

Common Raven, 52; Common Crow, 57; Black-capped Chickadee, 9; Boreal Chickadee, 1; Robin, 2; Starling, 77; House Sparrow, 67; Red-winged Blackbird, 1; Rusty Blackbird, 1; Common Grackle, 2; Brown-headed Cowbird, 7; American Goldfinch, 20; White-winged Crossbill, 2; Slate-coloured Junco, 1; Tree Sparrow, 12; Chipping Sparrow, 2**; White-throated Sparrow, 2; Song Sparrow, 4; bird sp., 19. Total species 44, about 7067 birds. (Seen in count period, Mallard, Ring-necked Duck, White-winged Scoter, American Coot, Glaucous Gull, Iceland Gull (Yumlico's), Razorbill, Thick-billed Murre, Belted Kingfisher, Red-breasted Nuthatch, Northern Shrike, Eastern Meadowlark, Evening Grosbeak, Pine Grosbeak, Savannah Sparrow. P.A. Pearce (compiler).

Grand Manan Channel (from deck of H.V. Grand Manan) - Dec. 30; 12.45 p.m. to 2.05 p.m. clear and sunny, unrestricted visibility; temp. 26°; wind NW, 15-20 mph. 1 Observer. Total party hours 1.3, by boat; total party miles 15, by boat. Great Black-backed Gull, 5; Herring Gull, 28; Black-legged Kittiwake, 21; Razorbill, 14; alcids sp., 11. Total species 4, 79 birds. P.A. Pearce.

THE MISSING

Species reported on counts during 1960-8, but not in 1969 were: Brant (68), Pintail (67), Canvasback (61), Marlequin Duck (63), King Eider (67), Broad-winged Hawk (64), Peregrine Falcon (68), Gray Partridge (60-66, 68), Am. Woodcock (65), Common Murre (63-4), Hawk Owl (61-2), Short-eared Owl, (61, 63, 66), Belted Kingfisher (61, 65, 68), Yellow-shafted Flicker (66), Black-backed Three-toed Woodpecker (68), Northern Three-toed Woodpecker (64), Winter Wren (61), Mockingbird (65-6, 68), Varied Thrush (65), Hermit Thrush (67), Water Pipit (68), Cedar Waxwing (68), Myrtle Warbler (61-2, 64-8), Palm Warbler (66), Cardinal (67), Savannah Sparrow (67-8).

The following were recorded during the count period in those years, but not in 1969; Fulmar (67), Ruddy Duck (65), Common Snipe (65), Screech Owl (62), Saw-whet Owl (65-6), Yellow-breasted Chat (61, 69).

NUMBER OF SPECIES

Species variety is a rather unimportant result of the Christmas Bird Counts. It tends to be more a reflection of the amount and finesse of the observers' effort than of the number of species actually present. In 1960, with 140 party-hours and 26 feeders, six counts produced 65 species. This has increased regularly almost every year since.

This year, Saint John had the most species, 49 (less than usual, due to weather of the 27th). A number of other counts had species totals in the mid-to high-forties, record counts for all of them. Riverside-Albert (48), Eastport-Campobello (48) and St. Andrews (47) were close behind Saint John. If one considers land-bird species only, Fredericton and Riverside-Albert, each with 37, and Sackville, 35, have the highest counts.

In northern New Brunswick, where all the counts were one party efforts, Blackville reports the most species, 26. With greater coverage most northern counts probably would have from 25 to 35 species, occasionally more.

It is interesting to speculate what variety might be seen on counts like Eastport-Campobello and Grand Manan, if coverage were as complete as in the city areas. Surely they would have the greatest variety in the province, in the neighbourhood of 55-65 species.

Natural Science Dept.,
New Brunswick Museum,
277 Douglas Ave.
Saint John, N.B.
February 12, 1970

Dear Naturalist:

Attached is the first issue of the New Brunswick Naturalist, a new newsletter which we hope will become a means of communication among persons interested in the natural history of the province.

We are planning to have six numbers a year. Number one contains the Christmas Bird Counts; number two will be issued in March and will include winter observations of mammals, birds, amphibians and any other phases of natural history for which interesting material is available - the weather comes quickly to mind! Send in your observations now.

This newsletter will contain observations of interest primarily to naturalists, whereas in Museum Memo, we will be having more formal articles of interest both to naturalists and the general public.

To cover the cost of the New Brunswick Naturalist we are asking \$1.00 per year subscription. (Payment should be made to "The New Brunswick Museum" and directed to the Natural Science Dept.) We plan to distribute it free to regular contributors of information, in return for their efforts in documenting our natural history. However, to ensure success, we hope that even some regular correspondents will assist with the cost, if they feel they are able.

Sincerely,

David S. Christie
CURATOR