

## The 122<sup>nd</sup> Christmas Bird Count in Michigan

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The 122<sup>nd</sup> Christmas Bird Count (CBC) produced stellar results in Michigan, perhaps helped by relatively mild winter weather throughout the period of the count. Data was gathered from 75 circles, including 14 in the Upper Peninsula (UP), 25 in the Northern Lower Peninsula (NLP), and 36 in the Southern Lower Peninsula (SLP). A total of 554,817 individuals of 158 species was recorded (the 3<sup>rd</sup> consecutive year that the 150-species threshold has been exceeded). At least 150 species have now been recorded in 5 of the last 10 years and 9 of the last 25 years. While no new species were added to the Michigan CBC list this year, American White Pelican (42 at Monroe) and Western Meadowlark (1 at Eagle Harbor) were each recorded for just the second time on a Michigan CBC. Other highlights included 15 rare species (reported in fewer than 5 of the previous 10 years), 7 borderline species (reported in 5 or 6 of the previous 10 years), 1 expected species missed (reported in 7 or more of the previous years but not this year), 1 count-week species (reported during count week but not on count day), 33 geographically limited species (reported at 10 or fewer circles), 10 species with record-high counts, 1 or more new species at 29 (46%) of 64 circles with a history of at least 10 count-years, 14 circles with at least 70 species, 13 circles with at least 13,500 individuals, and 10 circles with notable percentages of rare or unexpected species. Read on to learn about the exciting details of these and other results from the 122<sup>nd</sup> CBC in Michigan.

### **Cumulative Species on Michigan CBCs** (minimum of 150 all-time):

- 158 – 122<sup>nd</sup> (2021-22)
- 158 – 121<sup>st</sup> (2020-21)
- 152 – 113<sup>th</sup> (2012-13)
- 151 – 111<sup>th</sup> (2010-11)
- 150 – 120<sup>th</sup> (2019-20)
- 150 – 116<sup>th</sup> (2015-16)
- 150 – 102<sup>nd</sup> (2001-02)
- 150 – 100<sup>th</sup> (1999-2000)
- 150 – 98<sup>th</sup> (1997-98)

### **New Species** (reported on a Michigan CBC for the first time):

- None

### **Fifteen Rare Species** (reported on Michigan CBCs in fewer than 5 of the previous 10 years):

- American White Pelican – 42 at Monroe (SLP) – yearly reports in the previous 10, 25, and 50 years: 0, 0, 1
- Blue-winged Teal – 1 at Kalamazoo (SLP) – 4, 11, 27
- Purple Sandpiper – 2 at two circles (NLP—Oscoda 1; SLP—Berrien Springs 1) – 3, 13, 20
- Eurasian Collared-Dove – 5 at Muskegon Wastewater (SLP) – 3, 5, 5
- Northern Hawk Owl – 1 at Neebish Island-Dunbar (UP) – 1, 4, 5
- Tree Swallow – 7 at Rockwood (SLP) – 3, 6, 6

- Varied Thrush – 1 at Grayling (NLP) – 1, 4, 10
- Orange-crowned Warbler – 1 at Marquette (UP) – 4, 6, 6
- Ovenbird – 1 at Kalamazoo (SLP) – 2, 2, 3
- Pine Warbler – 1 at Clinton (SLP) – 1, 4, 8
- Rose-breasted Grosbeak – 1 at Higgins Lake-Houghton Lake (NLP), plus cw at Waterloo State Recreation Area (SLP) – 2, 7, 19
- Western Meadowlark – 1 at Eagle Harbor (UP) – 0, 0, 1
- Yellow-headed Blackbird – 1 at Rockwood (SLP) – 1, 3, 10
- Baltimore Oriole – 1 at Niles (SLP) – 2, 5, 9
- Hoary Redpoll – 18 at five circles (UP—Marquette 10, Eagle Harbor 4, Houghton County 2, Neebish Island-Dunbar 1; NLP—Mackinac Straits 1) – 4, 12, 20

**Seven Borderline Species** (reported on Michigan CBCs in 5 or 6 of the previous 10 years):

- Greater White-fronted Goose – 27 at two circles (SLP—Hudsonville 26, Muskegon Wastewater 1) – yearly reports in previous 10, 25, and 50 years: 6, 13, 16
- Harlequin Duck – 1 at Port Huron (SLP), plus cw at Tawas (NLP) – 6, 14, 24
- Barrow’s Goldeneye – 2 at two circles (NLP—Manistee 1; SLP—Holland 1) – 6, 8, 13
- Canada Jay – 3 at Little Bay de Noc (UP) – 5, 20, 43
- Marsh Wren – 3 at Anchor Bay (SLP) – 5, 13, 36
- Savannah Sparrow – 2 at two circles (SLP—Port Huron 1, Western Macomb County 1) – 5, 10, 20
- Eastern Meadowlark – 2 at Rockwood (SLP) – 6, 21, 46

**One Expected Species Missed** (species reported on Michigan CBCs in 7 or more of the previous 10 years but not this year):

- Wilson’s Snipe – yearly reports in previous 10, 25, and 50 years: 8, 22, 46

**One Count-week Species** (seen only during count week):

- Cape May Warbler – at Ludington (NLP) – yearly reports in previous 10, 25, and 50 years: 2, 4, 8

**Forty-one Geographically Limited Species** (expected species reported at 10 or fewer circles):

- Snow Goose – 14 at five circles (NLP—Oceana 1, Mount Pleasant 1, plus cw at Midland; SLP—Sanilac 8, Muskegon Wastewater 3, Hudsonville 1) – yearly reports in previous 10, 25, and 50 years: 10, 25, 49
- Cackling Goose – 14 at seven circles (NLP—Midland 2; SLP—East Lansing 4, Sanilac 3, Clinton 2, Ann Arbor 1, Huron County 1, Port Huron 1) – 10, 17, 17
- American Wigeon – 19 at nine circles (NLP—Traverse City 2, Mackinac Straits 1; SLP—Anchor Bay 4, Western Macomb County 3, Detroit 2, Kalamazoo 2, Monroe 2, Rockwood 2, Muskegon Wastewater 1) – 10, 25, 50
- Green-winged Teal – 20 at seven circles (NLP—Mackinac Straits 1, Tittabawassee Valley 1, plus cw at Manistee; SLP—Hudsonville 6, Anchor Bay 5, Monroe 4, Midland 2, Gobles 1, plus cw at Ann Arbor) – 10, 25, 48

- Canvasback – 24,096 at eight circles (NLP—Manistee 4, Tawas 3, Traverse City 1; SLP—Anchor Bay 12,100, Rockwood 11,806, Detroit River 177, Detroit 3, Clinton 2) – 10, 25, 50
- Surf Scoter – 6 at Holland (SLP), plus cw at Hartland (SLP) – 10, 22, 31
- Black Scoter – 1 at Battle Creek (SLP), plus cw at Berrien Springs (SLP) and Holland (SLP) – 10, 22, 32
- Sharp-tailed Grouse – 235 at four circles (UP—Rudyard 102, Les Cheneaux 89, Neebish Island-Dunbar 43; NLP—Mackinac Straits 1) – 10, 15, 20
- Red-throated Loon – 10 at five circles (NLP—Manistee 1; SLP—New Buffalo 4, Muskegon 3, Berrien Springs 1, Coloma 1, plus cw at Holland) – 10, 23, 28
- Common Loon – 15 at 9 circles (UP—Marquette 1, Houghton County 1; NLP—Traverse City 2, Antrim-Old Mission 1, Manistee 1; SLP—Port Huron 5, Coloma 2, Holland 1, Manistee 1, New Buffalo 1, plus cw at Anchor Bay) – 10, 25, 49
- Pied-billed Grebe – 26 at seven circles (NLP—Alpena 1, Cheboygan 1; SLP—Anchor Bay 13, Bay City 5, Ann Arbor 4, Holland 1, Port Huron 1, plus cw at Coloma) – 10, 25, 50
- Red-necked Grebe – 4 at two circles (NLP—Beulah 3, Antrim-Old Mission 1) – 10, 25, 35
- Great Egret – 4 at two circles (SLP—Monroe 3, Rockwood 1) – 8, 15, 17
- Black-crowned Night-Heron – 10 at Bay City (SLP) – 9, 22, 44
- Turkey Vulture – 46 at seven circles (UP—Drummond Island 2; SLP—Anchor Bay 18, Battle Creek 14, Barry County 8, Clinton 2, Huron County 1, New Buffalo 1, plus cw at Ann Arbor, Kalamazoo, & Pontiac) – 10, 24, 33
- Golden Eagle – 5 at four circles (NLP—Mount Pleasant 1; SLP—Sanilac 2, Battle Creek 1, Huron County 1) – 8, 19, 31
- Northern Goshawk – 2 at two circles (NLP—Mackinac Straits 1, Tawas 1) – 10, 25, 49
- Virginia Rail – 1 at Kalamazoo (SLP) – 9, 12, 29
- American Coot – 89 at eight circles (NLP—Midland 4, Manistee 3, Manistee 3, Beulah 1, Tawas 1; SLP—Monroe 50, Battle Creek 28, Ann Arbor 1, Beulah 1, Pontiac 1) – 10, 25, 50
- Killdeer – 1 at Kalamazoo (SLP) – 8, 22, 47
- Lesser Black-backed Gull – 14 at seven circles (SLP—Anchor Bay 7, Rockwood 2, Berrien Springs 1, Detroit 1, Detroit River 1, Monroe 1, Western Macomb County 1, plus cw at Genesee County & Holland) – 10, 25, 33
- Glaucous Gull – 27 at eight circles (UP—Rudyard 4, Marquette 3, Neebish Island-Dunbar 3; NLP—Alpena 1, Hubbard Lake 1; SLP—Sanilac 11, Holland 1) – 10, 25, 50
- Long-eared Owl – 2 at two circles (SLP—Detroit River 1, Grand Rapids 1) – 9, 22, 46
- Short-eared Owl – 6 at three circles (NLP—cw at Hubbard Lake; SLP—Sanilac 3, Rockwood 2, Muskegon Wastewater 1) – 10, 23, 47
- Northern Saw-whet Owl – 13 at nine circles (UP—Little Bay de Noc 1, Neebish Island-Dunbar 1; NLP—Cheboygan 2, Manistee 2; SLP—Anchor Bay 3, Ann Arbor 1, Genesee County 1, Hudsonville 1, Rockwood 1) – 10, 23, 39
- Eastern Phoebe – 2 at two circles (NLP—Manistee 1; SLP—Hartland 1, plus cw at Ann Arbor) – 7, 12, 19

- Ruby-crowned Kinglet – 3 at three circles (NLP—Midland 1; SLP—Anchor Bay 1, Monroe 1) – 9, 23, 48
- Gray Catbird – 10 at 9 circles (UP—cw at Marquette; NLP—Lake Leelanau 1, Mount Pleasant 1; SLP—Battle Creek 2, Anchor Bay 1, Ann Arbor 1, Berrien Springs 1, Detroit River 1, Hudsonville 1, Waterloo State Recreation Area 1) – 10, 24, 45
- Brown Thrasher – 2 at two circles (NLP—Carney 1, Grayling 1) – 8, 20, 42
- Northern Mockingbird – 6 at four circles (NLP—Cheboygan 1, Oscoda 1, Traverse City 1; SLP—Clinton 3, plus cw at Detroit River) – 10, 25, 50
- Bohemian Waxwing – 319 at four circles (UP—Whitefish Point 250, Marquette 51, Little Bay de Noc 17, Manistique 1, plus cw at Les Cheneaux & Rudyard; NLP—cw at Alpena) – 10, 25, 48
- Lapland Longspur – 116 at five circles (UP—Les Cheneaux 5; SLP—Dowagiac 60, Hudsonville 47, Western Macomb County 3, Port Huron 1) – 10, 24, 48
- Common Yellowthroat – 2 at two circles (SLP—Anchor Bay 1, Berrien Springs 1) – 8, 16, 35
- Chipping Sparrow – 2 at two circles (NLP—Grayling 1; SLP—Detroit 1, plus cw at Ann Arbor) – 10, 17, 32
- Field Sparrow – 8 at six circles (SLP—Dowagiac 2, Western Macomb County 2, Anchor Bay 1, Clinton 1, Hartland 1, Waterloo State Recreation Area 1, plus cw at Pontiac) – 10, 25, 50
- Fox Sparrow – 12 at eight circles (UP—Marquette 1; SLP—Coloma 3, Ann Arbor 2, Detroit River 2, Allegan State Game Area 1, Berrien Springs 1, Clinton 1, Kalamazoo 1) – 10, 25, 47
- Eastern Towhee – 11 at ten circles (NLP—Grayling 1, Midland 1; SLP—Pontiac 2, Allegan State Game Area 1, Anchor Bay 1, Battle Creek 1, Clinton 1, Detroit 1, Detroit River 1, Gobles 1, plus cw at Waterloo State Recreation Area) – 10, 25, 50
- Rusty Blackbird – 4 at two circles (SLP—Ann Arbor 3, Hudsonville 1, plus cw at Holland & Rockwood) – 10, 25, 49
- Red Crossbill – 31 at eight circles (UP—Little Bay de Noc 8, Rudyard 6, Whitefish Point 2, Neebish Island-Dunbar 1, plus cw at Marquette; NLP—Grayling 6, Mackinac Straits 5, Lake Leelanau 1, Ludington 2) – 9, 23, 43
- Evening Grosbeak – 82 at six circles (UP—Au Train 38, Rudyard 31, Les Cheneaux 2, Marquette 2; NLP—Grayling 8, Lake Leelanau 1) – 10, 25, 50

**Ten Species with Record-High Counts** (and comparison to previous highs):

- Trumpeter Swan – 563 (516 on 121<sup>st</sup> CBC)
- Common Goldeneye – 19,338 (19,045 on 109<sup>th</sup>)
- Hooded Merganser – 2135 (1853 on 116<sup>th</sup>)
- Sharp-tailed Grouse – 235 (195 on 118<sup>th</sup>)
- Red-shouldered Hawk – 111 (86 on 121<sup>st</sup>)
- Barred Owl – 64 (60 on 112<sup>th</sup>)
- Belted Kingfisher – 173 (167 on 121<sup>st</sup>)
- Common Raven – 984 (943 on 116<sup>th</sup>)
- Winter Wren – 78 (76 on 75<sup>th</sup>)
- Gray Catbird – 10 (8 on 118<sup>th</sup>)

**Sixteen Most Abundant Species** (minimum of 10,000 individuals; for context, the median number of individuals was 17):

- European Starling – 80,730 at 72 circles (max of 10,458 at Battle Creek)
- Canada Goose – 64,360 at 60 circles (max of 6985 at Midland)
- American Crow – 29,561 at 75 circles (max of 13,300 at Ann Arbor)
- Mallard – 27,818 at 67 circles (max of 2640 at Anchor Bay)
- Canvasback – 24,096 at 8 circles (max of 12,100 at Anchor Bay)
- Herring Gull – 20,343 at 61 circles (max of 3409 at Little Bay de Noc)
- Mourning Dove – 19,420 at 74 circles (max of 1459 at Hudsonville)
- Common Goldeneye – 19,338 at 57 circles (max of 8045 at Holland)
- House Sparrow – 17,865 at 69 circles (max of 2327 at Grand Rapids)
- Black-capped Chickadee – 17,858 at 75 circles (max of 1041 at Tittabawassee Valley)
- Dark-eyed Junco – 17,293 at 68 circles (max of 1079 at Ann Arbor)
- Redhead – 15,767 at 30 circles (max of 7000 at Anchor Bay)
- Rock Pigeon – 14,734 at 71 circles (max of 922 at Detroit River)
- Ring-billed Gull – 13,914 at 53 circles (max of 3490 at Battle Creek)
- Blue Jay – 13,380 at 74 circles (max of 643 at Detroit)
- American Goldfinch – 12,115 at 72 circles (max of 644 at Traverse City)

**Seventeen Most Widely Distributed Species** (minimum of 90% frequency, or 68 circles; for context, the median frequency was 23%, or 18 circles)

- Downy Woodpecker (100%) – 3549 individuals at 75 circles (max of 208 at Ann Arbor)
- American Crow (100%) – 29,561 at 75 circles (max of 13,300 at Ann Arbor)
- Black-capped Chickadee (100%) – 17,858 at 75 circles (max of 1041 at Tittabawassee Valley)
- Mourning Dove (99%) – 19,420 at 74 circles (max of 1459 at Hudsonville)
- Blue Jay (99%) – 13,380 at 74 circles (max of 643 at Detroit)
- White-breasted Nuthatch (99%) – 3998 at 74 circles (max of 301 at Ann Arbor)
- Hairy Woodpecker (97%) – 1086 at 73 circles (max of 52 at Ann Arbor)
- Red-bellied Woodpecker (96%) – 2350 at 72 circles (max of 226 at Ann Arbor)
- European Starling (96%) – 80,730 at 72 circles (max of 10,458 at Battle Creek)
- Northern Cardinal (96%) – 6606 at 72 circles (max of 558 at Ann Arbor)
- Bald Eagle (95%) – 1012 at 71 circles (max of 133 at Monroe)
- Rock Pigeon (95%) – 14,734 at 71 circles (max of 922 at Detroit River)
- Red-breasted Nuthatch (95%) – 1230 at 71 circles (max of 99 at Hudsonville)
- Pileated Woodpecker (93%) – 503 at 70 circles (max of 22 at Lake County)
- American Goldfinch (92%) – 12,115 at 72 circles (max of 644 at Traverse City)
- House Sparrow (92%) – 17,865 at 69 circles (max of 2327 at Grand Rapids)
- Dark-eyed Junco (91%) – 17,293 at 68 circles (max of 1079 at Ann Arbor)

**Eighty-nine Species Had Numerical Outliers** (circles with counts outside the expected range in species reported at 11 or more circles; medians are shown for context):

- Canada Goose (median=858) – Midland 6985, East Lansing 4584 [n=60 circles]

- Mute Swan (23) – Anchor Bay 460, Rockwood 362, Monroe 173, Detroit 152, Hartland 137 [n=45]
- Trumpeter Swan (7) – Battle Creek 79, Tawas 59, Beulah 47 [n=39]
- Tundra Swan (5) – Tuscola U.F.A. 2200, Rockwood 296, Huron County 130 [n=17]
- Gadwall (17.5) – Rockwood 709, Monroe 279, Kalamazoo 104, Gobles 65 [n=20]
- American Black Duck (5) – Anchor Bay 310, Rockwood 125, Bay City 60, Midland 30, Cadillac Area 26, Western Macomb County 24, Traverse City 22, Monroe 17 [n=47]
- Mallard (241) – Anchor Bay 2640, Bay City 2171, Rockwood 2167, Marquette 1189 [n=67]
- Northern Shoveler (2) – Muskegon Wastewater 196, Monroe 18 [n=11]
- Northern Pintail (2) – Anchor Bay 450 [n=21]
- Redhead (15.5) – Anchor Bay 7000, Detroit River 1089 [=30]
- Ring-necked Duck (7) – Pontiac 264, Clinton 186, Detroit 175 [n=22]
- Greater Scaup (21) – Anchor Bay 220, Rockwood 84 [n=15]
- Lesser Scaup (4.5) – Rockwood 510, Monroe 342, Anchor Bay 245, Muskegon 200 [n=26]
- White-winged Scoter (4) – Beulah 21 [n=13]
- Long-tailed Duck (17.5) – Muskegon 4363, Hudsonville 727, Manistee 561, Ludington 213, Port Huron 131 [n=26]
- Bufflehead (18) – Anchor Bay 980, Detroit River 179, Rockwood 177, Holland 163, Monroe 163, Battle Creek 135 [n=51]
- Common Goldeneye (44) – Holland 8045, Monroe 4225, Bay City 1103, Rockwood 790, Ludington 545, Antrim-Old Mission 456, Midland 419, Beulah 416 [n=57]
- Hooded Merganser (14.5) – Western Macomb County 447, Monroe 317, Anchor Bay 140, [n=48]
- Common Merganser (34) – Monroe 904, Bay City 595, Mount Pleasant 434, Western Macomb County 385, Genesee County 341, Lake Leelanau 322, Tawas 273 [n=48]
- Red-breasted Merganser (16) – Holland 687, Ludington 654, Beulah 463, Monroe 388 [n=35]
- Ruddy Duck (4) – Midland 45, Anchor Bay 29, Coloma 25 [n=14]
- Ring-necked Pheasant (2) – Carney 48, Lapeer County 11 [n=15]
- Ruffed Grouse (3.5) – Rudyard 23 [n=28]
- Wild Turkey (47.5) – Ann Arbor 359, Carney 230, Midland 222, Little Bay de Noc 203 [n=66]
- Horned Grebe (2) – Little Bay de Noc 13, Beulah 12 [n=12]
- Double-crested Cormorant (2) – Monroe 456, Bay City 45 [n=13]
- Great Blue Heron (3) – Monroe 74, Rockwood 37, Ann Arbor 23, Detroit River 16, Clinton 12, Bay City 11 [n=43]
- Northern Harrier (1.5) – Sanilac 15, Anchor Bay 14, Huron County 8 [n=28]
- Sharp-shinned Hawk (1) – Western Macomb County 5 [n=33]
- Cooper's Hawk (4) – Western Macomb County 21, Ann Arbor 20, East Lansing 17, Anchor Bay 16 [n=44]
- *Accipiter* sp. (1) – Detroit 4 [n=11]
- Bald Eagle (8) – Monroe 133, Rudyard 100, Bay City 64, Hayward Lakes 35, Rockwood 35 [n=71]

- Red-shouldered Hawk (2) – Gobles 17, Midland 13, New Buffalo 13, Coloma 11, Beulah 9 [n=29]
- Red-tailed Hawk (21) – Hudsonville 75, Clinton 70 [n=63]
- Rough-legged Hawk (2) – Rudyard 20, Hayward Lakes 16, Little Bay de Noc 15, Mount Pleasant 13 [n=51]
- Sandhill Crane (31.5) – Waterloo State Recreation Area 1717, Dowagiac 1254 [n=26]
- Bonaparte's Gull (11.5) – Rockwood 579, Anchor Bay 117 [n=16]
- Ring-billed Gull (82) – Battle Creek 3490, Pontiac 1442, Anchor Bay 1320, Monroe 1230, Rockwood 819, Detroit River 674, Coloma 558, Port Huron 501 [n=53]
- Herring Gull (59) – Little Bay de Noc 3409, Sanilac 3123, Coloma 2522, Bay City 2096, Anchor Bay 1940, Marquette 1311, Port Huron 1217, Midland 456, Monroe 420, Detroit River 419, Rudyard 400 [n=61]
- Great Black-backed Gull (7) – Monroe 60, Anchor Bay 45 [n=17]
- gull sp. (14.5) – Hudsonville 298, Rockwood 262, Port Huron 219 [n=36]
- Rock Pigeon (150) – Detroit River 922, Port Huron 884, Ann Arbor 735, Little Bay de Noc 699 [n=71]
- Mourning Dove (177.5) – Hudsonville 1459, Western Macomb County 1431, Rockwood 1012 [n=74]
- Eastern Screech-Owl (4) – Anchor Bay 29, Clinton 27, Western Macomb County 25 [n=26]
- Great Horned Owl (2.5) – Grand Rapids 9 [n=34]
- Snowy Owl (1) – Rudyard 23, Anchor Bay 9, Neebish Island-Dunbar 6, Tuscola U.F.A. 4 [n=21]
- Belted Kingfisher (3) – Western Macomb County 12, Ann Arbor 11, Kalamazoo 9, Rockwood 9 [n=50]
- Red-bellied Woodpecker (22.5) – Ann Arbor 226 [n=72]
- Yellow-bellied Sapsucker (1) – Berrien Springs 4 [n=13]
- Downy Woodpecker (34) – Ann Arbor 208, Kalamazoo 161 [n=75]
- Hairy Woodpecker (14) – Ann Arbor 52, Hudsonville 45, Cheboygan 36 [n=73]
- Northern Flicker (7.5) – Kalamazoo 55 [n=46]
- Pileated Woodpecker (6) – Lake County 22 [n=70]
- American Kestrel (5) – Hudsonville 38, Clinton 27, Midland 25, Mount Pleasant 23 [n=50]
- Northern Shrike (1) – Rudyard 9, Neebish Island-Dunbar 8, Cheboygan 6, Carney 4, Les Cheneaux 4 [n=37]
- Blue Jay (154.5) – Detroit 643, Ann Arbor 629, Coloma 495 [n=74]
- American Crow (146) – Ann Arbor 13,300, Kalamazoo 3500, Sanilac 674, Niles 575 [n=75]
- Common Raven (14) – Rudyard 111, Neebish Island-Dunbar 106, Hayward Lakes 90, Grayling 76, Les Cheneaux 63 [n=41]
- Black-capped Chickadee (214) – Tittabawassee Valley 1041, Les Cheneaux 993, Ann Arbor 723, Midland 680 [n=75]
- Tufted Titmouse (44) – Ann Arbor 282, Kalamazoo 176 [n=59]
- Red-breasted Nuthatch (13) – Hudsonville 99, Antrim-Old Mission 59, Sanilac 58, Lake Leelanau 43, Grayling 41, Beulah 40 [n=71]

- White-breasted Nuthatch (40.5) – Ann Arbor 301, Kalamazoo 206 [n=74]
- Brown Creeper (4) – Rockwood 20 [n=57]
- Winter Wren (2) – Detroit River 10, Beulah 9, Rockwood 9, Anchor Bay 8, Kalamazoo 7 [n=26]
- Golden-crowned Kinglet (5.5) – Rockwood 64, Lake Leelanau 36, Antrim-Old Mission 28, Beulah 28, Ludington 26, Hudsonville 20 [n=54]
- Eastern Bluebird (36) – Ann Arbor 173 [n=46]
- Hermit Thrush (2) – Western Macomb County 8, Anchor Bay 6 [n=25]
- American Robin (30.5) – Ann Arbor 941 [n=50]
- European Starling (633) – Ann Arbor 10,458, Anchor Bay 4360, Coloma 4205, Western Macomb County 4027, Pontiac 3946, East Lansing 3718, Grand Rapids 3277 [n=72]
- Cedar Waxwing (61) – Beulah 697, Grand Rapids 673, Ludington 584 [n=59]
- Snow Bunting (105) – Huron County 1810 [n=24]
- Yellow-rumped Warbler (2) – Allegan State Game Area 62 [n=15]
- American Tree Sparrow (51.5) – Western Macomb County 399, Waterloo State Recreation Area 361, Ann Arbor 317, Anchor Bay 310 [n=60]
- Dark-eyed Junco (207) – Ann Arbor 1079 [n=68]
- White-crowned Sparrow (3) – Niles 28, Hudsonville 21, Berrien Springs 16 [n=17]
- White-throated Sparrow (6) – Ann Arbor 151, Rockwood 120, Detroit River 56, Anchor Bay 48, Western Macomb County 40 [n=33]
- Song Sparrow (7.5) – Anchor Bay 69, Rockwood 69, Ann Arbor 59 [n=40]
- Swamp Sparrow (1) – Anchor Bay 75, Western Macomb County 22, Detroit River 18, Ann Arbor 7 [n=21]
- Northern Cardinal (52) – Ann Arbor 558, Midland 336, Grand Rapids 310 [n=72]
- Red-winged Blackbird (4) – Monroe 7000, Anchor Bay 280 [n=18]
- Common Grackle (2) – Monroe 500, Cass County 100 [n=17]
- Brown-headed Cowbird (2.5) – Cass County 337 [n=16]
- Pine Grosbeak (29) – Rudyard 176, Neebish Island-Dunbar 114 [n=16]
- House Finch (66.5) – Hudsonville 468, Ann Arbor 353, Western Macomb County 324 [n=58]
- Purple Finch (2) – Coloma 42, Beulah 13, Manistique 13, Oscoda 13, Barry County 9 [n=38]
- White-winged Crossbill (28) – Grayling 96 [n=24]
- Common Redpoll (65) – Tawas 938, Gwinn 525, Mecosta County 497, Rudyard 482 [n=50]
- Pine Siskin (7.5) – Alpena 184, Holland 76, Mecosta County 74, Huron County 70, Little Bay de Noc 35 [n=40]
- American Goldfinch (142.5) – Traverse City 644, Ann Arbor 619 [n=72]
- House Sparrow (102) – Grand Rapids 2327, Western Macomb County 1243, Mount Pleasant 1021 [n=69]

**Nineteen Species Were Numerically Dominant in at Least One Circle** (as a percentage of total individuals; the median of the 75 circles was 24.2%):



- European Starling: 17 circles (NLP—Ludington 28.6%, Alpena 27.6%, Lake Leelanau 13.8%; SLP—Pontiac 33.0%, Coloma 31.5%, Cass County 28.0%, New Buffalo 27.3%, Niles 26.2%, Western Macomb County 26.2%, Gobles 24.2%, Grand Rapids 24.2%, Lapeer County 22.3%, Genesee County 21.5%, Hudsonville 18.6%, Hartland 17.5%, Port Huron 14.8%, Detroit 14.5%,)
- Canada Goose: 17 circles (NLP—Midland 45.1%, Petoskey 31.0%, Oceana 25.2%, Mount Pleasant 23.0%, Tittabawassee Valley 17.8%, Bay City 16.9%; SLP—Holland 50.9%, Muskegon Wastewater 46.3%, Huron County 31.6%, East Lansing 30.1%, Albion 25.1%, Allegan State Game Area 23.7%, Barry County 23.0%, Clinton 21.1%, Berrien Springs 20.6%, Olivet 20.1%, Detroit River 15.6%)
- Black-capped Chickadee: 7 circles (UP—Drummond Island 50.3%, Les Cheneaux 39.4%, Neebish Island-Dunbar 21.5%, Houghton County 14.4%; NLP—Lake County 18.2%, Grayling 17.4%, Hubbard Lake 12.9%)
- Common Redpoll: 6 circles (UP—Gwinn 43.9%, Eagle Harbor 29.1%, Rudyard 15.8%, Hayward Lakes 14.7%; NLP—Tawas 24.2%, Mecosta County 16.5%,)
- Mallard: 3 circles 3 (UP—Manistique 22.2%; NLP—Higgins Lake-Houghton Lake 20.1%, Antrim-Old Mission 15.4%)
- Redhead: 3 circles (NLP—Mackinac Straits 65.5%, Cheboygan 27.9%, Traverse City 25.9%)
- Herring Gull: 3 circles (UP—Little Bay de Noc 43.4%, Marquette 26.6%; SLP—Sanilac 28.3%,)
- American Crow: 3 circles (NLP—Sturgeon Point 38.9%; SLP—Ann Arbor 35.7%, Kalamazoo 32.5%)
- Canvasback: 2 circles (SLP—Rockwood 42.0%, Anchor Bay 26.9%)
- Long-tailed Duck: 2 circles (NLP—Manistee 14.1%; SLP—Muskegon 62.4%,)
- Sandhill Crane: 2 circles (SLP—Dowagiac 27.3%, Waterloo State Recreation Area 22.3%)
- Mourning Dove: 2 circles (UP—Carney 17.4%, NLP—Cadillac Area 16.8%)
- Blue Jay: 2 circles (UP—Au Train 19.6%; NLP—Oscoda 13.9%))
- Cedar Waxwing: 2 circles (UP—Whitefish Point 48.1%; NLP—Beulah 10.5%)
- Tundra Swan: 1 circle (SLP—Tuscola U.F.A. 49.5%)
- Common Goldeneye: 1 circle (SLP—Holland 50.9%)
- Wild Turkey: 1 circle (NLP—Ogemaw County 20.5%)
- Ring-billed Gull: 1 circle (SLP—Battle Creek 27.3%)
- Red-winged Blackbird: 1 circle (SLP—Monroe 28.5%)

**Twenty-nine Circles Recorded New Species** (45% of 64 circles with a history of at least 10 counts recorded at least one new species; stated another way, 29 circles with a combined 1011 count-years tallied a cumulative 49 new species):

- 5 species – at one circle (NLP—Tawas)
- 4 species – at zero circles
- 3 species – at each of four circles (UP—Manistique; NLP—Oscoda; SLP—Hartland, Muskegon Wastewater)
- 2 species – at each of eight circles (UP—Carney, Eagle Harbor, Little Bay de Noc; NLP—Bay City, Tittabawassee Valley; SLP—Clinton, Hudsonville, Olivet,)

- 1 species – at each of 16 circles (UP—Whitefish Point; NLP--Cadillac Area, Higgins Lake-Houghton Lake, Hubbard Lake, Lake Leelanau, Ludington, Manistee, Midland; SLP—Detroit, Detroit River, Genesee County, Huron County, Kalamazoo, Niles, Port Huron, Western Macomb County)

**Fourteen Circles Recorded At Least 70 Species** (the median number was 57):

- 96 – Anchor Bay (45,058 individuals)
- 83 – Rockwood (28,086)
- 79 – Clinton (10,236)
- 79 – Hudsonville (14,868)
- 78 – Coloma (13,334)
- 76 – Ann Arbor (37,306)
- 76 – Western Macomb County (15,384)
- 74 – Holland (15,814)
- 73 – Kalamazoo (10,757)
- 73 – Monroe (24,551)
- 72 – Sanilac (11,029)
- 71 – Berrien Springs (5536)
- 70 – Detroit River (8414)
- 70 – Midland (15,479)

**Thirteen Circles Recorded >12,500 Individuals** (the median number was 4689):

- 45,058 – Anchor Bay (96 species)
- 37,306 – Ann Arbor (76)
- 28,086 – Rockwood (83)
- 24,551 – Monroe (73)
- 15,814 – Holland (74)
- 15,479 – Midland (70)
- 15,384 – Western Macomb County (76)
- 15,220 – East Lansing (58)
- 14,868 – Hudsonville (79)
- 13,524 – Grand Rapids (61)
- 13,344 – Coloma (78)
- 12,843 – Bay City (62)
- 12,798 – Battle Creek (68)

**Ten Circles Had High Indices of Rarity** (the index of rarity is the number of rare and infrequently seen species as a percentage of the total number of species, with a minimum of 35%; the median was 26.5%):

- 44.4% - Marquette (18 of 54)
- 42.9% - Midland (24 of 70)
- 42.6% - Battle Creek (25 of 78)
- 39.3% - Muskegon (21 of 61)
- 38.2% - Ann Arbor (28 of 76)

- 38.0% - Hudsonville (25 of 79)
- 37.9% - Detroit (20 of 66)
- 37.3% - Ludington (19 of 59)
- 36.8% - Little Bay de Noc (19 of 57)
- 35.6% - Kalamazoo (22 of 73)

**Thirteen Circles Were Relative Hotspots** (species with exceptionally high counts—i.e., outliers—as a percentage of total species, with a minimum of 10.0%; the median for all 61 circles with outliers was 4.9%):

- 30.3% - Ann Arbor (23 of 76)
- 26.3% - Anchor Bay (25 of 95)
- 24.0% - Monroe (18 of 75)
- 23.1% - Rudyard (9 of 39)
- 22.9% - Rockwood (19 of 83)
- 19.7% - Western Macomb County (15 of 76)
- 15.9% - Beulah (11 of 69)
- 14.3% - Midland (10 of 70)
- 12.9% - Detroit River (9 of 70)
- 11.8% - Battle Creek (8 of 68)
- 11.4% - Hudsonville (9 of 79)
- 11.0% - Kalamazoo (8 of 73)
- 10.5% - Little Bay de Noc (6 of 57)

### **Correction to 121<sup>st</sup> Count**

The Yellow-throated Warbler reported from Beulah, which was indeed a rarity, was not a first CBC record for Michigan, as reported. It was, in fact, the 3<sup>rd</sup> Michigan CBC record, the species having previously been reported on the 88<sup>th</sup>, 104<sup>th</sup> CBCs (plus a cw occurrence on the 117<sup>th</sup>) – yearly reports in the preceding 10, 25, and 50 years: 0, 1, 2. Consequently, the number of new species seen on the 121<sup>st</sup> CBC is reduced to 3, and the number of rare species is increased to 12.