Appendix 1. Seasonal abundances of sea ducks estimated during aerial surveys (Lower Great Lakes Migrant Waterfowl Survey [LGLMWS], Mid-Winter Survey [MWS]; raw data with visual correction factors applied) or counted during ground-based surveys (Christmas Bird Count [CBC]; no visual correction factors applied) undertaken within the **Eastern Lake Ontario** Key Site between 1997 and 2018.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Survey** | **Season** | **Year** | **Total** | **LTDU** | **BUFF** | **COGO** | **HOME** | **COME** | **RBME** | **BLSC** | **SUSC** | **WWSC** |
| LGLMWS | Spring | 1999 | 117,317 | 95,466 | 6,924 | 8,278 | 125 | 5,442 | 610 | 5 | 5 | 461 |
|  |  | 2009 | 32,377 | 10,465 | 4,646 | 10,406 | 420 | 2,353 | 3,838 | 14 | 0 | 235 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Max: | 117,317 | 95,466 | 6,924 | 10,406 | 420 | 5,442 | 3,838 | 14 | 5 | 461 |
|  |  | Avg: | 74,847 | 52,966 | 5,785 | 9,342 | 273 | 3,898 | 2,224 | 10 | 3 | 348 |
|  |  | %: |  | 0.71 | 0.08 | 0.12 | 0.00 | 0.05 | 0.03 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LGLMWS | Fall | 1999 | 192,837 | 127,918 | 15,276 | 12,227 | 5,046 | 3,850 | 3,657 | 1,068 | 224 | 23,570 |
|  |  | 2009 | 88,383 | 30,103 | 4,365 | 15,307 | 816 | 7,779 | 3,338 | 3,148 | 87 | 23,440 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Max: | 192,837 | 127,918 | 15,276 | 15,307 | 5,046 | 7,779 | 3,657 | 3,148 | 224 | 23,570 |
|  |  | Avg: | 140,610 | 79,011 | 9,821 | 13,767 | 2,931 | 5,815 | 3,497 | 2,108 | 156 | 23,505 |
|  |  | %: |  | 0.56 | 0.07 | 0.10 | 0.02 | 0.04 | 0.02 | 0.01 | 0.00 | 0.17 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| MWS | Winter | 2002 | 21,588 | 9,460 | 3,853 | 3,776 | 0 | 1,283 | 3,216 | 0 | 0 | 0 |
|  |  | 2003 | 15,483 | 451 | 4,711 | 6,258 | 0 | 3,186 | 874 | 0 | 0 | 3 |
|  |  | 2004 | 19,818 | 4,217 | 6,341 | 5,741 | 0 | 3,519 | 0 | 0 | 0 | 0 |
|  |  | 2005 | 13,058 | 4,764 | 3,599 | 3,595 | 0 | 673 | 416 | 0 | 0 | 10 |
|  |  | 2006 | 31,708 | 21,259 | 1,672 | 7,394 | 0 | 544 | 839 | 0 | 0 | 0 |
|  |  | 2007 | 45,766 | 34,785 | 5,806 | 3,094 | 49 | 1,990 | 41 | 0 | 0 | 0 |
|  |  | 2008 | 89,480 | 75,189 | 5,304 | 5,248 | 0 | 3,056 | 683 | 0 | 0 | 0 |
|  |  | 2009 | 31,557 | 22,582 | 1,891 | 5,403 | 0 | 334 | 1,347 | 0 | 0 | 0 |
|  |  | 2010 | 28,147 | 23,601 | 424 | 1,536 | 0 | 1,820 | 381 | 0 | 0 | 385 |
|  |  | 2011 | 68,833 | 60,278 | 557 | 2,530 | 0 | 3,095 | 1,982 | 3 | 3 | 386 |
|  |  | 2012 | 156,045 | 146,745 | 3,840 | 2,344 | 0 | 2,096 | 113 | 0 | 0 | 907 |
|  |  | 2013 | 113,364 | 88,626 | 10,373 | 2,864 | 0 | 8,412 | 404 | 0 | 0 | 2,685 |
|  |  | 2014 | 58,833 | 51,081 | 2,432 | 4,024 | 0 | 1,004 | 66 | 0 | 0 | 226 |
|  |  | 2015 | 51,042 | 45,568 | 176 | 661 | 0 | 4,540 | 89 | 0 | 0 | 9 |
|  |  | 2016 | 91,531 | 86,376 | 2,452 | 2,019 | 0 | 502 | 0 | 0 | 0 | 183 |
|  |  | 2017 | 105,449 | 93,735 | 1,904 | 4,482 | 0 | 3,938 | 0 | 26 | 0 | 1,364 |
|  |  | 2018 | 107,199 | 103,735 | 111 | 1,704 | 0 | 307 | 0 | 35 | 0 | 1,307 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Max: | 156,045 | 146,745 | 10,373 | 7,394 | 49 | 8,412 | 3,216 | 35 | 3 | 2,685 |
|  |  | Avg: | 61,700 | 51,321 | 3,262 | 3,687 | 3 | 2,371 | 615 | 4 | 0 | 439 |
|  |  | %: |  | 0.83 | 0.05 | 0.06 | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | 0.01 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| CBC | Winter | 1997 | 44,664 | 39,485 | 700 | 3,025 | 15 | 268 | 14 | 0 | 0 | 1,157 |
|  |  | 1998 | 107,010 | 102,357 | 1,209 | 1,620 | 19 | 202 | 56 | 2 | 1 | 1,544 |
|  |  | 1999 | 146,099 | 136,788 | 1,515 | 3,530 | 83 | 1,122 | 428 | 8 | 4 | 2,621 |
|  |  | 2000 | 53,209 | 48,552 | 713 | 2,453 | 0 | 1,210 | 32 | 3 | 6 | 240 |
|  |  | 2001 | 155,254 | 148,903 | 1,127 | 3,266 | 199 | 222 | 189 | 3 | 1 | 1,344 |
|  |  | 2002 | 15,327 | 7,004 | 953 | 5,704 | 2 | 427 | 1,070 | 3 | 0 | 164 |
|  |  | 2003 | 19,308 | 13,061 | 1,790 | 3,942 | 12 | 255 | 70 | 3 | 5 | 170 |
|  |  | 2004 | 17,441 | 4,716 | 437 | 4,941 | 19 | 7,129 | 111 | 12 | 0 | 76 |
|  |  | 2005 | 20,026 | 14,129 | 217 | 4,596 | 17 | 599 | 370 | 3 | 0 | 95 |
|  |  | 2006 | 16,954 | 12,067 | 938 | 2,352 | 16 | 614 | 743 | 6 | 0 | 218 |
|  |  | 2007 | 6,929 | 2,262 | 676 | 3,469 | 4 | 323 | 173 | 0 | 0 | 22 |
|  |  | 2008 | 5,575 | 2,363 | 251 | 2,579 | 0 | 254 | 94 | 1 | 0 | 33 |
|  |  | 2009 | 19,470 | 14,111 | 383 | 3,506 | 2 | 262 | 1,057 | 1 | 0 | 148 |
|  |  | 2010 | 29,588 | 24,994 | 369 | 3,292 | 6 | 740 | 155 | 1 | 1 | 30 |
|  |  | 2011 | 25,638 | 22,767 | 698 | 1,449 | 94 | 303 | 194 | 1 | 1 | 131 |
|  |  | 2012 | 4,556 | 1,292 | 731 | 1,371 | 284 | 58 | 708 | 10 | 2 | 100 |
|  |  | 2013 | 4,038 | 1,644 | 201 | 1,707 | 1 | 323 | 160 | 0 | 0 | 2 |
|  |  | 2014 | 6,333 | 3,123 | 443 | 2,044 | 16 | 265 | 373 | 1 | 1 | 67 |
|  |  | 2015 | 14,415 | 11,495 | 814 | 1,497 | 165 | 92 | 234 | 5 | 0 | 113 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Max: | 155,254 | 148,903 | 1,790 | 5,704 | 284 | 7,129 | 1,070 | 12 | 6 | 2,621 |
|  |  | Avg: | 37,465 | 32,164 | 746 | 2,965 | 50 | 772 | 328 | 3 | 1 | 435 |
|  |  | %: |  | 0.86 | 0.02 | 0.08 | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.01 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |