

Appendix 1. Seasonal peak 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 **Upper St. Lawrence River Key Site** between 1997 and 2018.

Survey	Season	Year	Total	LTDU	BUFF	COGO	HOME	COME	RBME	BLSC	SUSC	WWSC
LGLMWS	Spring	1999	11,526	0	1,467	5,715	328	3,653	325	0	0	38
		2009	12,209	821	2,787	2,643	371	3,102	2,436	0	0	49
		Max:	12,209	821	2,787	5,715	371	3,653	2,436	0	0	49
	Avg:	11,867	410	2,127	4,179	350	3,377	1,380	0	0	44	
	%:		0.03	0.18	0.35	0.03	0.28	0.12	0.00	0.00	0.00	
	LGLMWS	Fall	1999	6,138	0	786	2,960	91	2,095	206	0	0
2009			9,052	793	985	4,760	87	1,734	693	0	0	0
Max:			9,052	793	985	4,760	91	2,095	693	0	0	0
Avg:		7,595	397	885	3,860	89	1,915	450	0	0	0	
%:			0.05	0.12	0.51	0.01	0.25	0.06	0.00	0.00	0.00	
MWS		Winter	2002	12,336	0	531	1,718	0	10,040	46	0	0
	2003		14,338	86	597	3,109	0	8,273	2,274	0	0	0
	2004		13,407	34	577	4,933	0	7,863	0	0	0	0
	2005		10,679	0	306	2,541	0	7,831	0	0	0	0
	2006		46,023	21	121	3,320	0	40,293	2,261	3	2	2
	2007		3,540	0	691	1,437	122	1,237	53	0	0	0
	2008		10,649	137	440	1,843	0	8,229	0	0	0	0
	2009		8,069	0	231	595	0	4,976	2,266	0	0	0
	2010		31,520	12,237	62	941	0	14,240	4,040	0	0	0
	2011		6,673	0	95	738	0	3,308	2,533	0	0	0
	2012		9,135	10	196	1,594	0	7,279	57	0	0	0
	2013		9,973	0	883	1,723	0	7,366	0	0	0	0
	2014		2,821	499	0	669	0	1,653	0	0	0	0
	2015		2,499	451	7	230	50	1,756	4	0	0	0
	2016		22,432	68	2,546	1,275	0	18,426	117	0	0	0
2017	9,536	2,196	538	2,269	0	4,265	248	0	0	21		
2018	3,696	75	33	818	0	2,745	0	26	0	0		
Max:	46,023	12,237	2,546	4,933	122	40,293	4,040	26	2	21		
Avg:	12,784	930	462	1,750	10	8,811	818	2	0	1		
%:		0.07	0.04	0.14	0.00	0.69	0.06	0.00	0.00	0.00		
CBC	Winter	1997	2,820	23	84	696	3	1,969	10	4	0	31
		1998	2,102	7	111	1,095	34	836	9	4	0	6
		1999	6,333	16	363	2,442	38	3,311	78	4	6	75
		2000	2,376	5	72	1,471	16	801	6	2	1	2
		2001	2,982	1	581	1,100	121	1,051	103	7	2	16
		2002	8,564	178	1,614	3,889	24	2,699	151	1	0	8
		2003	5,127	110	228	2,169	8	2,041	561	2	0	8
		2004	3,548	3	383	688	10	2,338	124	1	0	1
		2005	8,834	8	381	2,067	23	6,128	217	2	0	8
		2006	3,389	20	406	1,557	85	836	474	5	3	3
2007	1,843	0	13	613	2	1,202	13	0	0	0		
2008	9,500	371	254	1,819	78	6,521	441	1	1	14		

		2009	10,607	1,522	213	2,735	37	4,176	1,902	5	2	15
		2010	11,499	1,630	305	2,387	86	5,520	1,566	1	0	4
		2011	11,189	636	392	1,812	128	4,641	3,554	2	15	9
		2012	12,579	408	714	1,331	218	2,937	6,956	5	0	10
		2013	3,330	124	190	1,163	23	852	967	2	0	9
		2014	18,064	4,560	197	1,134	149	3,473	8,538	1	2	10
		2015	3,985	636	157	1,013	248	505	1,416	0	0	10
		Max:	18,064	4,560	1,614	3,889	248	6,521	8,538	7	15	75
		Avg:	6,772	540	350	1,641	70	2,728	1,426	3	2	13
		%:		0.08	0.05	0.24	0.01	0.40	0.21	0.00	0.00	0.00