

**Table S1.** Mollusc species reported from Oneida Lake. Presence-absence (+/-), density ( $\text{m}^{-2}$   $\pm$  standard error, where available), and biomass ( $\text{mg m}^{-2}$   $\pm$  standard error, lakewide 2012 only) data given for Lower South Bay (LSB) and lakewide.

	<u>1915-17</u> [22, 23]		<u>1967-68</u> [24]		<u>1992-95</u> [25, 72]		<u>2012</u>		
	LSB (1917)	Lake- wide	LSB (1967)	Lake- wide	LSB (1992)	Lake- wide	LSB	Lakewide Density	Lakewide Biomass
<b>Gastropods:</b>									
<i>Acella haldemani</i> <sup>3,4</sup>	0.3 $\pm$ 0.3	+	-	+	-	-	-	-	-
<i>Amnicola limosus</i>	171.5 $\pm$ 26.0	+	-	+	-	+	150.3 $\pm$ 34.4	101.8 $\pm$ 27.1	781 $\pm$ 172
<i>Amnicola pupoideus</i>	-	-	-	-	-	-	1.6 $\pm$ 1.2	1.6 $\pm$ 1.0	11 $\pm$ 7
<i>Bithynia tentaculata</i> <sup>1</sup>	8.3 $\pm$ 4.3	+	435.0	+	+	+	8.4 $\pm$ 3.7	77.2 $\pm$ 15.5	2251 $\pm$ 640
<i>Campeloma decisum</i> <sup>3</sup>	4.5 $\pm$ 2.0	+	-	+	-	-	-	-	-
<i>Cipangopaludina chinensis</i> <sup>1</sup>	-	-	-	-	-	-	-	+	+
<i>Elimia livescens</i>	5.7 $\pm$ 2.2	+	2.0	+	+	+	2.1 $\pm$ 1.4	2.8 $\pm$ 1.7	132 $\pm$ 59
<i>Elimia virginica</i> <sup>2</sup>	-	-	1.0	+	-	-	3.8 $\pm$ 1.8	1.0 $\pm$ 0.3	310 $\pm$ 125
<i>Ferrissia parallela</i>	6.0 $\pm$ 2.2	+	-	+	+	+	5.2 $\pm$ 2.9	1.7 $\pm$ 0.5	6 $\pm$ 2
<i>Ferrissia rivularis</i> <sup>3</sup>	-	+	-	+	-	-	-	-	-
<i>Fossaria obrussa</i>	0.3 $\pm$ 0.3	+	-	+	+	+	1.6 $\pm$ 1.2	3.2 $\pm$ 1.2	22 $\pm$ 8
<i>Gyraulus crista</i>	-	-	-	-	-	-	0.5 $\pm$ 0.5	0.2 $\pm$ 0.2	2 $\pm$ 2
<i>Gyraulus circumstriatus</i>	-	-	-	-	-	-	7.6 $\pm$ 4.9	0.8 $\pm$ 0.5	4 $\pm$ 3
<i>Gyraulus deflectus</i>	8.1 $\pm$ 2.5	+	1.0	+	+	+	53.6 $\pm$ 25.3	16.6 $\pm$ 3.0	55 $\pm$ 10
<i>Gyraulus parvus</i>	97.7 $\pm$ 18.1	+	5.0	+	+	+	175.2 $\pm$ 60.8	136.5 $\pm$ 60.6	228 $\pm$ 38
<i>Helisoma anceps</i>	10.8 $\pm$ 4.0	+	1.0	+	+	+	3.1 $\pm$ 1.6	3.0 $\pm$ 1.9	10 $\pm$ 7
<i>Laevapex fuscus</i>	0.6 $\pm$ 0.5	+	-	+	+	+	7.1 $\pm$ 3	1.7 $\pm$ 0.6	11 $\pm$ 4
<i>Lymnaea stagnalis</i> <sup>3,4</sup>	-	+	-	-	-	-	-	-	-
<i>Physella spp.</i>	58.0 $\pm$ 15.8	n.a.	13.0	n.a.	n.a.	n.a.	111.8 $\pm$ 37.2	100.1 $\pm$ 41.8	518 $\pm$ 94
<i>Physella ancillaria</i>	+	+	+	+	-	-	+	+	+
<i>Physella gyrina</i>	-	+	-	+	-	-	-	-	-
<i>Physella heterostropha</i>	-	-	-	+	-	-	+	+	+
<i>Physella integra</i>	+	+	-	+	+	+	+	+	+
<i>Planorbella campanulata</i>	7.2 $\pm$ 1.9	+	-	+	-	+	-	-	-
<i>Planorbella trivolvis</i>	5.1 $\pm$ 2.7	+	-	+	+	+	20.6 $\pm$ 8.8	12.8 $\pm$ 2.2	394 $\pm$ 56

<i>Pleurocera acuta</i> <sup>2</sup>	-	+	-	-	-	-	-	0.6±0.2	331±135
<i>Pomatiopsis cincinnatiensis</i>	2.4±1.5	+	7.0	+	-	+	-	0.02±0.02	1±1
<i>Probythinella emarginata</i> <sup>3</sup>	0.2±0.1	+	-	-	-	-	-	-	-
<i>Promenetus exacuus</i> <sup>2</sup>	12.9±3.1	+	-	-	-	+	1.2±0.8	1.3±0.8	8±4
<i>Pseudosuccinea columella</i> <sup>3</sup>	1.0±0.9	+	-	+	-	+	-	-	-
<i>Pyrgulopsis lustrica</i>	285.6±80.4	+	3.0	+	+	+	18.2±7.5	2.8±0.8	29±11
<i>Somatogyrus depressus</i> <sup>3,4</sup>	0.02±0.02	+	-	-	-	-	-	-	-
<i>Stagnicola catascopium</i> <sup>2</sup>	86.8±18.2	+	-	+	-	-	67.4±26.3	27.3±7.5	475±110
<i>Stagnicola elodes</i>	-	+	-	+	+	+	-	0.1±0.1	8±5
<i>Stagnicola emarginata</i> <sup>3</sup>	-	+	-	+	-	-	-	-	-
<i>Valvata lewisi</i> <sup>2</sup>	-	+	-	+	-	-	0.5±0.5	1.6±1.1	45±38
<i>Valvata piscinalis</i> <sup>1</sup>	-	-	-	-	-	-	1.0±1.0	2.0±1.8	71±63
<i>Valvata sincera</i>	0.6±0.3	+	-	+	-	+	-	6.0±3.9	14±8
<i>Valvata tricarinata</i>	18.2±5.5	+	4.0	+	-	+	53.9±25.3	109.2±39.0	1152±441
<i>Viviparus georgianus</i>	0.01±0.01	+	-	+	+	+	+	+	+
Total gastropod species:	26 (1)	32 (1)	10 (1)	29 (1)	13 (1)	20 (1)	23 (2)	29 (3)	

**Bivalves:**

<i>Dreissena polymorpha</i> <sup>1</sup>	-	-	-	-	+	+	923.8±194.2	780.5±158.9	63278±12304
<i>Dreissena r. bugensis</i> <sup>1</sup>	-	-	-	-	-	-	1462.8±500.7	1635.0±395.4	397662±112597
<i>Actinonaias ligamentina</i>	-	+	n.a.	-	-	-	-	-	-
<i>Alasmidonta undulate</i>	-	+	n.a.	+	-	-	-	-	-
<i>Elliptio complanata</i>	15.0±3.6	+	+	+	+	+	-	-	-
<i>Lampsilis radiata</i>	3.0±0.6	+	n.a.	+	+	+	-	-	-
<i>Leptodea fragilis</i>	-	-	n.a.	+	-	+	-	-	-
<i>Ligumia recta</i>	-	-	n.a.	+	-	-	-	-	-
<i>Margaritifera margaritifera</i>	-	+	n.a.	+	-	-	-	-	-
<i>Pisidium</i> spp.	284.7±97.7	+	n.a.	n.a.	n.a.	n.a.	16.0±4.5	41.3±13.3	202±58
<i>Potamilus alatus</i>	-	-	n.a.	+	-	+	-	-	-
<i>Pyganodon cataracta</i>	0.3±0.1	+	n.a.	-	-	-	-	-	-
<i>Pyganodon grandis</i>	0.4±0.2	+	+	+	+	+	-	-	-
<i>Strophitus undulatus</i>	-	+	n.a.	+	-	-	-	-	-

<i>Villosa iris</i>	-	+	n.a.	-	-	-	-	-
Total bivalve species:	4 (0)	9 (0)	n.a.	9 (0)	4 (1)	6 (1)	2 (2)	2 (2)
<b>Total species:</b>	<b>30 (1)</b>	<b>41 (1)</b>	<b>10 (1)</b>	<b>38 (1)</b>	<b>17 (2)</b>	<b>26 (2)</b>	<b>26 (4)</b>	<b>31 (5)</b>

Note: Density data for Lower South Bay is the mean density ( $m^{-2}$ ) of each species across all samples collected in each study; lakewide densities and biomass for 2012 represent averages weighted by substrate and depth. For quantitative studies, + indicates a species found in qualitative samples. n.a. indicates a species was not sampled (or not recorded) in study. Total species tallies exclude sphaeriids, and denote the number of exotic species in parentheses.

<sup>1</sup> - species exotic to the region; <sup>2</sup> - gastropod species extirpated during eutrophication which has recovered by 2012; <sup>3</sup> - gastropod species which has not recovered following eutrophication; <sup>4</sup> - species classified as threatened/endangered by Johnson et al. [26]