

Supplement B: Summary of Genetic Diversity Estimates for Sockeye Salmon

Supplementary Table S.B.2. A summary of genetic diversity estimates for 13 microsatellite loci in Sockeye Salmon from 12 locations (S1–S12) within or near the Katmai National Park and Preserve and in kokanee from Dakavak, Devil’s Cove, and Jo-Jo lakes. The estimates include expected heterozygosity (H_e), observed heterozygosity (H_o), and allelic richness (A_r). Estimates of H_o that were judged significantly lower than H_e after correcting α (0.05) for multiple tests are in bold italics. The sample size obtained from each aggregation is shown in parentheses.

Location ^a	Statistic	Omy77	One100	One102	One103	One105	One108	One110	One111	One114	One115	Ots103	Ots107	uSat60	Average
S1 (64)	A_r	3.00	15.10	7.96	18.20	3.49	8.90	9.25	15.17	13.41	10.93	12.63	3.49	2.86	9.57
	H_e	0.557	0.867	0.678	0.908	0.363	0.834	0.851	0.847	0.865	0.816	0.880	0.148	0.454	0.698
	H_o	0.547	0.922	0.812	0.921	0.422	0.812	0.953	0.891	0.875	0.781	0.906	0.156	0.469	0.728
S2 (60)	A_r	4.96	16.22	13.06	18.03	3.67	13.92	13.08	17.98	15.41	13.79	13.62	4.45	5.19	11.80
	H_e	0.601	0.883	0.893	0.922	0.367	0.902	0.893	0.895	0.917	0.910	0.908	0.358	0.539	0.768
	H_o	0.633	0.867	0.833	0.906	0.417	0.883	0.867	0.881	0.917	0.933	0.867	0.333	0.500	0.757
S3 (81)	A_r	4.71	22.65	13.16	20.68	3.97	11.80	13.37	18.68	17.40	16.48	15.75	4.24	4.62	12.88
	H_e	0.591	0.936	0.881	0.933	0.236	0.901	0.898	0.900	0.939	0.922	0.917	0.236	0.571	0.759
	H_o	0.593	0.926	0.901	0.951	0.210	0.951	0.877	0.889	0.938	0.914	0.901	0.235	0.593	0.760
S4 (60)	A_r	4.62	18.57	9.49	19.69	2.99	13.10	12.87	14.09	16.27	15.14	15.00	3.66	4.22	11.52
	H_e	0.567	0.917	0.810	0.916	0.172	0.878	0.862	0.893	0.919	0.920	0.899	0.229	0.475	0.727
	H_o	0.583	0.690	0.800	0.893	0.183	0.850	0.933	0.883	0.915	0.850	0.883	0.250	0.433	0.704
S5 (96)	A_r	4.33	19.42	13.48	23.33	3.77	13.51	14.12	21.83	20.41	15.44	14.26	5.61	5.49	13.46
	H_e	0.494	0.927	0.833	0.953	0.235	0.903	0.896	0.913	0.944	0.919	0.906	0.337	0.551	0.755
	H_o	0.49	0.885	0.760	0.896	0.240	0.927	0.875	0.937	0.958	0.906	0.948	0.375	0.490	0.745
S6 (60)	A_r	7.08	17.07	12.88	25.83	2.99	14.08	11.66	20.80	18.76	16.07	15.94	5.34	5.86	13.41
	H_e	0.612	0.922	0.886	0.960	0.320	0.905	0.895	0.879	0.936	0.928	0.906	0.203	0.554	0.762
	H_o	0.567	0.667	0.917	0.949	0.362	0.850	0.926	0.793	0.850	0.917	0.933	0.183	0.550	0.728
S7 (75)	A_r	5.87	27.14	12.42	24.23	3.53	12.83	14.45	20.17	18.48	15.15	16.83	6.03	4.34	13.96

Location ^a	Statistic	<i>Omy77</i>	<i>One100</i>	<i>One102</i>	<i>One103</i>	<i>One105</i>	<i>One108</i>	<i>One110</i>	<i>One111</i>	<i>One114</i>	<i>One115</i>	<i>Ots103</i>	<i>Ots107</i>	<i>uSat60</i>	Average
S8 (86)	<i>H_e</i>	0.556	0.949	0.855	0.950	0.304	0.896	0.881	0.879	0.940	0.915	0.926	0.339	0.542	0.764
	<i>H_o</i>	0.573	0.932	0.867	0.929	0.333	0.867	0.907	0.840	0.932	0.919	0.880	0.347	0.547	0.759
	<i>A_r</i>	3.42	11.10	8.47	18.77	2.00	7.98	8.71	12.87	13.51	11.57	10.60	3.72	4.42	9.01
	<i>H_e</i>	0.448	0.779	0.745	0.915	0.433	0.842	0.853	0.890	0.869	0.857	0.844	0.355	0.435	0.713
S9 (62)	<i>H_o</i>	0.488	0.767	0.640	0.904	0.442	0.872	0.802	0.941	0.930	0.849	0.895	0.372	0.442	0.719
	<i>A_r</i>	6.08	19.77	10.56	22.42	5.27	12.61	14.28	17.64	16.07	15.04	12.12	4.29	5.17	12.41
	<i>H_e</i>	0.572	0.906	0.834	0.937	0.421	0.897	0.893	0.886	0.914	0.893	0.878	0.249	0.554	0.756
	<i>H_o</i>	0.629	0.823	0.839	0.918	0.435	0.919	0.918	0.903	0.952	0.984	0.887	0.258	0.532	0.769
S10 (86)	<i>A_r</i>	5.69	15.79	9.67	16.28	2.47	10.94	11.69	16.75	14.39	12.54	14.73	3.00	3.00	10.53
	<i>H_e</i>	0.671	0.879	0.811	0.899	0.428	0.806	0.881	0.873	0.920	0.873	0.898	0.343	0.523	0.754
	<i>H_o</i>	0.598	0.908	0.793	0.897	0.322	0.805	0.943	0.885	0.977	0.782	0.895	0.368	0.552	0.748
	<i>A_r</i>	6.63	16.20	13.03	30.60	5.64	15.45	13.90	22.52	15.58	12.26	15.10	5.63	3.46	13.54
S11 (56)	<i>H_e</i>	0.727	0.916	0.882	0.964	0.566	0.888	0.873	0.917	0.924	0.867	0.901	0.348	0.506	0.791
	<i>H_o</i>	0.786	0.946	0.857	0.964	0.618	0.929	0.786	0.964	0.929	0.857	0.875	0.268	0.491	0.790
	<i>A_r</i>	8.81	15.76	13.80	19.80	3.95	11.85	12.95	19.00	17.76	12.95	14.94	3.95	3.00	12.19
	<i>H_e</i>	0.608	0.887	0.816	0.936	0.331	0.877	0.896	0.879	0.913	0.887	0.889	0.323	0.482	0.748
DAK (96)	<i>H_o</i>	0.524	0.881	0.762	0.857	0.333	0.905	0.881	0.95	0.929	0.881	0.952	0.381	0.548	0.753
	<i>A_r</i>	5.77	15.27	10.96	30.90	3.00	11.49	9.69	18.47	14.88	12.20	12.93	4.08	4.04	11.82
	<i>H_e</i>	0.602	0.899	0.865	0.954	0.293	0.848	0.678	0.925	0.869	0.89	0.889	0.55	0.475	0.749
	<i>H_o</i>	0.594	0.857	0.854	0.965	0.292	0.896	0.677	0.926	0.844	0.948	0.871	0.479	0.469	0.744
DEV (95)	<i>A_r</i>	3.00	16.42	8.85	20.80	2.92	12.38	10.74	6.61	12.11	9.27	8.97	2.00	3.65	9.06
	<i>H_e</i>	0.367	0.916	0.866	0.93	0.121	0.91	0.739	0.676	0.891	0.791	0.805	0.119	0.176	0.639
	<i>H_o</i>	0.404	0.884	0.905	0.956	0.126	0.926	0.789	0.642	0.863	0.8	0.811	0.126	0.179	0.647
	<i>A_r</i>	2.00	12.81	7.55	13.16	3.00	7.41	8.82	7.37	14.19	9.65	8.63	2.00	2.00	7.58
JOJ (95)	<i>H_e</i>	0.502	0.870	0.782	0.909	0.364	0.743	0.808	0.816	0.913	0.793	0.801	0.119	0.497	0.686
	<i>H_o</i>	0.547	0.895	0.789	0.915	0.368	0.705	0.863	0.863	0.895	0.895	0.768	0.126	0.495	0.702

^a Collection codes: for Sockeye Salmon, S1 = Charlene Creek; S2 = Dumpling Creek 1, S3 = Dumpling Creek 3, S4 = East La Gorce Creek, S5 = Hammersly Lake, S6 = Idavain Creek, S7 = Katolinat Creek 4, S8 = Lower Q-Tip Lake, S9 = North La Gorce Creek, S10 = Swikshak River, S11 = Karluk River, and S12 = Surprise Lake; for kokanee, DAK = Dakavak Lake, DEV = Devil's Cove Lake, and JOJ = Jo-Jo Lake.