

Supporting Information Table S1 Summary of locus-specific patterns across the Sitka-white spruce zone of introgression, including genetic data analysis, geographic and genomic cline analysis for 268 candidate gene SNPs. Candidate gene SNPs used in the study include locus number, name, heterozygosity (H_e), genetic differentiation (F_{ST}), and inbreeding coefficient (F_{IS}). Geographic cline parameters included identify regression model, R^2 , AIC, maximum slope, and lambda (λ) of the fit data. Genomic cline selection categories indicate over (+) or under (-) representation of genotypic classes based on a model of neutral

#	Locus Name	H_e	F_{ST}	F_{IS}	Reg ^a	R^2	Geographic Clines			Genomic Clines		
							AIC	Max slope	λ	Selection Categories ^b	WW	WS
1	0_10112.contig2.C2.352	0.33	0.34	-0.05	Log	0.79	-57.73	0.004	111	WW	WS-	SS
2	0_10754.contig2.C1.179	0.19	0.03	0.00	Lin	0.10	-75.49	0	-	-	-	-
3	0_12681.contig2.C2.315	0.07	0.04	-0.04	Lin	0.11	-90.33	0	-	WW	WS+	SS
4	0_13680.contig2.C1.149	0.26	0.42	0.05	Log	0.83	-82.63	0.004	152	WW-	WS-	SS+
5	0_13680.contig2.NC1.68	0.33	0.37	0.00	Exp	0.86	-71.74	0.01	203	WW	WS	SS
6	0_14976.contig2.NC1.354	0.05	0.05	0.03	Lin	0.39	-118.44	0	-	WW	WS	SS
7	0_15075.contig2.C2.341	0.11	0.04	0.08	Lin	0.08	-80.53	0	-	WW+	WS-	SS
8	0_16142.contig2.C1.266	0.23	0.47	0.04	Exp	0.80	-84.67	0.009	220	WW-	WS-	SS+
9	0_17017.contig2.C1.225	0.34	0.43	0.04	Log	0.63	-30.07	0.004	106	WW	WS	SS
10	0_17017.contig2.NC1.250	0.34	0.43	0.03	Log	0.65	-31.17	0.004	110	WW	WS	SS
11	0_17238.contig2.NC1.122	0.31	0.18	-0.03	Exp	0.72	-73.64	0.004	161	WW	WS	SS
12	100_316_NS	0.42	0.19	0.01	Exp	0.20	-45.29	0.001	< 0	WW-	WS+	SS+
13	103_455_NS	0.44	0.07	-0.08	Lin	0.06	-38.24	0	-	WW+	WS	SS-
14	114_248_S	0.41	0.11	-0.03	Lin	0.34	-47.85	0.001	-	WW	WS	SS
15	124_495_S	0.47	0.12	-0.02	Exp	0.40	-34.66	0.002	8	WW	WS	SS
16	125_312_S	0.29	0.45	0.13	Exp	0.75	-56.79	0.011	214	WW	WS-	SS
17	127_273_S	0.27	0.19	-0.03	Exp	0.54	-71.05	0.002	140	WW-	WS-	SS+
18	13_496_NS	0.45	0.12	-0.06	Exp	0.33	-29.25	0.002	18	WW	WS	SS
19	13_632_S	0.50	0.16	-0.02	Exp	0.39	-26.08	0.002	< 0	WW+	WS-	SS
20	132_78_S	0.42	0.15	-0.02	Exp	0.42	-33.02	0.003	81	WW+	WS+	SS-
21	133_39_S	0.21	0.18	-0.08	Exp	0.34	-57.67	0.002	155	WW	WS	SS
22	133_418_S	0.41	0.14	-0.12	Log	0.63	-43.09	0.003	< 0	WW+	WS-	SS-
23	133_553_NS	0.42	0.11	-0.01	Exp	0.52	-46.91	0.003	77	WW+	WS+	SS-
24	135_122_NS	0.44	0.02	0.03	Lin	0.00	-50.70	0	-	WW	WS	SS
25	14_248_NS	0.50	0.12	-0.02	Exp	0.34	-35.56	0.002	< 0	WW-	WS	SS+
26	14_301_NS	0.50	0.11	-0.03	Exp	0.37	-37.74	0.002	< 0	WW-	WS	SS+
27	141_349_S	0.27	0.16	-0.29	Log	0.77	-70.72	0.003	81	WW-	WS+	SS+
28	144_441_S	0.46	0.44	-0.02	Exp	0.61	-13.82	0.009	163	WW+	WS-	SS-
29	162_199_S	0.49	0.04	0.03	Lin	0.12	-40.39	0	-	WW+	WS-	SS-
30	164_465_S	0.49	0.13	0.04	Lin	0.06	-31.02	0	-	WW-	WS	SS+
31	169_375_NS	0.23	0.13	0.06	Log	0.53	-59.94	0.002	67	WW	WS	SS
32	179_114_S	0.41	0.09	0.00	Lin	0.43	-44.48	0.001	-	WW+	WS	SS
33	179_319_NS	0.47	0.13	-0.08	Exp	0.20	-23.81	0.001	< 0	WW	WS+	SS+
34	179_699_S	0.49	0.20	-0.08	Exp	0.48	-28.30	0.003	43	WW	WS	SS
35	19_567_S	0.46	0.05	-0.08	Lin	0.10	-54.08	0	-	WW-	WS+	SS
36	191_162_S	0.26	0.06	-0.04	Exp	0.48	-66.57	0.002	124	WW	WS-	SS
37	194_470_S	0.49	0.15	-0.01	Exp	0.67	-53.05	0.003	50	WW	WS	SS
38	195_356_NS	0.25	0.47	0.02	Log	0.67	-60.94	0.005	177	WW-	WS-	SS+
39	198_447_S	0.04	0.03	0.10	Lin	0.02	-113.04	0	-	-	-	-
40	20_374_NS	0.42	0.36	0.02	Log	0.74	-34.76	0.007	146	WW+	WS+	SS-
41	206_435_NS	0.38	0.10	0.00	Exp	0.34	-44.34	0.002	44	WW	WS	SS
42	208PG02825j	0.30	0.07	-0.01	Exp	0.16	-44.91	0.001	< 0	WW	WS	SS
43	208PG04280j	0.24	0.16	0.25	Exp	0.18	-49.54	0.001	84	WW	WS-	SS
44	208PG08590a	0.42	0.12	-0.01	Exp	0.27	-37.00	0.002	< 0	WW	WS	SS
45	208pg10495g	0.26	0.36	0.05	Exp	0.78	-65.62	0.01	213	WW	WS	SS
46	208pg10524e	0.27	0.24	0.01	Log	0.53	-56.26	0.002	60	WW	WS	SS
47	208pg10802g.1	0.31	0.29	0.03	Log	0.71	-51.55	0.005	158	WW	WS	SS
48	208pg12875c	0.23	0.23	-0.04	Log	0.88	-76.21	0.005	152	WW-	WS+	SS+
49	208pg13043k	0.21	0.19	-0.04	Exp	0.23	-55.06	0.001	124	WW-	WS-	SS+
50	208PG13612a	0.15	0.07	-0.07	Lin	0.01	-55.48	0	-	WW	WS-	SS
51	209_523_S	0.38	0.14	-0.02	Exp	0.44	-43.43	0.003	94	WW	WS	SS
52	213_153_S	0.24	0.33	-0.01	Log	0.73	-61.78	0.005	152	WW	WS	SS

53	213_330_S	0.31	0.40	0.07	Log	0.77	-58.81	0.004	124	WW	WS	SS
54	213_468_NS	0.23	0.33	-0.01	Log	0.73	-61.38	0.004	134	WW	WS	SS
55	213_72_S	0.30	0.42	0.08	Log	0.77	-59.58	0.004	127	WW	WS	SS
56	214_180_S	0.39	0.29	-0.06	Exp	0.71	-40.80	0.008	177	WW+	WS	SS
57	214_558_S	0.37	0.31	-0.03	Exp	0.72	-43.22	0.008	185	WW+	WS	SS
58	215_132_S	0.37	0.18	-0.05	Exp	0.49	-46.58	0.003	117	WW	WS	SS
59	222_305_S	0.50	0.10	-0.12	Lin	0.07	-35.39	0	-	WW-	WS+	SS+
60	222_370_S	0.13	0.07	0.00	Lin	0.00	-62.60	0	-	WW	WS	SS
61	242_241_S	0.25	0.20	0.00	Log	0.50	-75.72	0.001	53	WW-	WS-	SS+
62	244_118_NS	0.29	0.04	-0.04	Lin	0.03	-50.82	0	-	WW	WS	SS
63	245_170_NS	0.36	0.25	-0.05	Exp	0.51	-43.88	0.004	141	WW-	WS-	SS+
64	245_281_S	0.48	0.15	0.04	Exp	0.27	-30.39	0.002	< 0	WW	WS	SS
65	245_98_NS	0.29	0.16	-0.02	Exp	0.42	-43.37	0.003	154	WW	WS-	SS
66	249_648_S	0.50	0.11	0.00	Exp	0.09	-33.06	0.001	< 0	WW-	WS	SS+
67	252_200_NS	0.26	0.07	0.07	Exp	0.37	-66.36	0.002	98	WW	WS	SS
68	259_736_NS	0.44	0.25	-0.03	Log	0.65	-38.59	0.003	74	WW	WS+	SS-
69	260_264_S	0.44	0.25	-0.02	Log	0.66	-39.59	0.003	82	WW	WS+	SS-
70	260_84_S	0.44	0.25	-0.03	Log	0.65	-38.59	0.003	71	WW	WS+	SS-
71	27_420_S	0.50	0.10	0.00	Lin	0.29	-44.27	0	-	WW	WS	SS-
72	27_711_S	0.31	0.11	0.08	Exp	0.45	-46.14	0.003	146	WW+	WS-	SS
73	27_99_S	0.15	0.04	-0.02	Lin	0.02	-72.16	0	-	WW	WS	SS
74	273507_S	0.50	0.04	0.04	Lin	0.04	-34.19	0	-	WW	WS	SS-
75	288_302_NS	0.47	0.19	-0.02	Log	0.67	-44.06	0.003	50	WW	WS	SS+
76	29_177_S	0.50	0.13	0.06	Lin	0.18	-28.89	0	-	WW-	WS+	SS+
77	29_592_S	0.46	0.19	0.08	Exp	0.39	-28.60	0.003	46	WW	WS	SS-
78	295_78_S	0.43	0.19	0.00	Exp	0.46	-40.51	0.003	76	WW	WS	SS
79	2iTC2438a	0.41	0.14	0.00	Exp	0.47	-35.82	0.003	96	WW+	WS	SS
80	2pa08pg12519k	0.31	0.20	-0.06	Log	0.67	-51.70	0.002	74	WW	WS+	SS
81	2TC7674e	0.16	0.12	0.01	Exp	0.30	-64.34	0.002	15	WW	WS	SS
82	30_423_S	0.44	0.03	-0.01	Lin	0.01	-43.14	0	-	WW	WS	SS
83	41_150_NS	0.50	0.08	-0.03	Lin	0.26	-39.55	0	-	WW+	WS	SS-
84	45_1067_NS	0.21	0.03	-0.01	Lin	0.11	-69.89	0	-	WW	WS+	SS
85	46_575_NS	0.43	0.08	0.00	Lin	0.34	-47.05	0	-	WW+	WS-	SS-
86	46_623_NS	0.46	0.11	-0.01	Exp	0.37	-39.14	0.001	< 0	WW+	WS	SS-
87	50_135_S	0.20	0.07	-0.01	Exp	0.26	-70.15	0.001	100	WW	WS+	SS
88	51_36_S	0.35	0.31	0.05	Exp	0.67	-46.52	0.007	187	WW	WS-	SS
89	68_286_S	0.44	0.28	-0.01	Exp	0.80	-48.66	0.008	163	WW+	WS+	SS-
90	69_753_S	0.38	0.06	0.19	Lin	0.05	-35.94	0	-	WW-	WS	SS+
91	71_365_NS	0.50	0.12	0.00	Exp	0.32	-28.42	0.002	< 0	WW	WS	SS
92	84_261_S	0.35	0.05	0.01	Lin	0.17	-54.77	0	-	WW	WS	SS
93	84_370_NS	0.46	0.25	-0.02	Exp	0.59	-32.94	0.005	117	WW	WS	SS-
94	85_279_S	0.33	0.35	0.08	Log	0.56	-33.93	0.002	87	WW	WS	SS
95	86_438_S	0.32	0.34	0.13	Log	0.73	-54.70	0.003	107	WW	WS	SS
96	89_300_NS	0.46	0.25	-0.02	Exp	0.59	-33.66	0.005	119	WW	WS	SS-
97	89_37_NS	0.46	0.25	-0.02	Exp	0.59	-33.66	0.005	119	WW	WS	SS-
98	97_489_S	0.45	0.10	0.04	Lin	0.54	-50.21	0.001	-	WW	WS	SS
99	BB.PF00643.12e	0.15	0.08	0.01	Lin	0.22	-57.59	0.001	-	WW+	WS+	SS
100	BB.PF0139.20e	0.50	0.12	0.29	Exp	0.33	-24.71	0.002	< 0	WW+	WS-	SS-
101	C13628.contig2.C4.584	0.34	0.32	0.04	Exp	0.81	-67.63	0.008	192	WW	WS	SS
102	C14881.contig5.C1.273	0.18	0.43	-0.05	Exp	0.43	-63.52	0.004	202	WW-	WS+	SS+
103	C1498.contig1.NC1.839	0.37	0.34	-0.03	Log	0.67	-31.34	0.005	137	WW+	WS+	SS-
104	C1498.contig1.NC2.1166	0.28	0.08	-0.01	Exp	0.10	-42.56	0.001	< 0	WW+	WS-	SS-
105	C16679.contig1.C1.315	0.45	0.07	-0.03	Exp	0.30	-37.75	0.002	< 0	WW+	WS	SS-
106	C18467.contig1.NC2.168	0.34	0.37	-0.03	Exp	0.51	-40.87	0.005	163	WW	WS	SS
107	C20322.contig1.NC3.296	0.37	0.31	0.01	Log	0.75	-40.82	0.007	107	WW+	WS	SS
108	C20925.contig1.NC3.450	0.21	0.08	-0.10	Exp	0.51	-65.03	0.003	174	WW	WS+	SS
109	C2211.contig1.C5.1435	0.09	0.16	0.07	Exp	0.50	-93.41	0.004	215	WW	WS-	SS
110	C2270.contig1.NC1.384	0.31	0.39	0.06	Log	0.66	-44.62	0.003	104	WW	WS	SS
111	C2285.contig1.C2.449	0.12	0.16	-0.03	Exp	0.24	-80.06	0.001	155	WW-	WS-	SS+
112	C2319.contig2.NC1.360	0.24	0.29	0.02	Log	0.82	-67.12	0.006	170	WW+	WS	SS
113	C24607.contig1.NC4.1208	0.32	0.31	0.00	Log	0.86	-68.62	0.004	108	WW	WS	SS
114	C3300.contig1.NC4.640	0.48	0.03	0.01	Lin	0.07	-43.11	0	-	WW	WS	SS-

115	C4447.contig1.C2.631	0.36	0.30	-0.04	Log	0.73	-49.86	0.005	149	WW	WS	SS
116	C4545.contig1.C1.200	0.33	0.03	0.02	Lin	0.03	-55.95	0	-	WW+	WS-	SS-
117	C4575.contig1.C2.853	0.33	0.09	0.01	Lin	0.29	-45.30	0	-	WW+	WS	SS
118	C4773.contig1.NC1.338	0.22	0.31	0.10	Log	0.53	-49.31	0.002	112	WW	WS-	SS
119	C4944.contig2.C2.472	0.11	0.19	-0.01	Exp	0.66	-115.58	0.003	213	WW-	WS-	SS+
120	C4944.contig2.C4.573	0.24	0.19	0.06	Exp	0.60	-73.56	0.003	170	WW	WS-	SS
121	C4944.contig2.C5.740	0.40	0.07	-0.01	Lin	0.10	-31.30	0.001	-	WW+	WS+	SS-
122	C5104.contig1.C1.624 ⁱ	0.38	0.13	0.07	Exp	0.54	-44.53	0.003	119	WW+	WS	SS
123	C6522.contig1.NC1.269 ⁱ	0.49	0.04	-0.02	Lin	0.02	-35.90	0	-	WW	WS	SS
124	C6814.contig1.NC8.578	0.50	0.04	-0.04	Lin	0.00	-40.37	0	-	WW-	WS	SS+
125	C6847.contig1.C2.1238	0.26	0.05	0.02	Lin	0.45	-74.21	0.001	-	WW	WS	SS
126	C717.contig2.NC2.162	0.49	0.04	0.09	Lin	0.02	-34.82	0	-	WW	WS	SS
127	C7807.contig1.C1.230	0.15	0.12	0.01	Exp	0.27	-79.31	0.001	145	WW	WS	SS
128	C8159.contig1.NC7.1499	0.50	0.04	0.11	Lin	0.09	-43.82	0	-	WW	WS	SS
129	C9634.contig2.NC2.1086	0.10	0.07	0.01	Lin	0.43	-100.82	0	-	WW	WS	SS
130	C996.contig1.NC1.663	0.37	0.10	-0.01	Lin	0.11	-69.87	0	-	WW-	WS-	SS+
131	C996.contig1.NC4.945	0.34	0.14	0.10	Lin	0.19	-67.26	0	-	WW-	WS-	SS+
132	CL1458Contig1.contig2.C2.311	0.39	0.29	-0.12	Exp	0.71	-50.78	0.006	161	WW	WS+	SS
133	CL1458Contig1.contig2.C3.377	0.19	0.03	0.00	Lin	0.10	-75.02	0	-	-	-	-
134	CO481261.contig1.NC7.671	0.12	0.04	-0.01	Lin	0.05	-75.73	0	-	WW	WS	SS
135	CO484662.contig1.C1.269	0.19	0.03	-0.01	Lin	0.15	-70.34	0	-	WW	WS	SS
136	P03539.4	0.24	0.11	-0.06	Log	0.62	-56.76	0.002	77	WW+	WS+	SS
137	p09832.2	0.18	0.19	0.05	Exp	0.79	-72.42	0.011	221	WW+	WS	SS
138	P15825.2	0.21	0.24	-0.07	Log	0.47	-53.01	0.002	129	WW	WS	SS
139	P4800.3	0.19	0.30	0.04	Exp	0.78	-83.33	0.009	221	WW	WS	SS
140	P6937.1	0.37	0.13	0.03	Exp	0.41	-40.63	0.003	102	WW-	WS-	SS+
141	P7108.2	0.45	0.12	0.04	Exp	0.69	-57.93	0.003	82	WW+	WS	SS-
142	P9580.1	0.22	0.24	0.10	Exp	0.87	-87.61	0.011	219	WW+	WS	SS
143	PTC9341	0.25	0.09	-0.06	Exp	0.45	-68.20	0.002	129	WW	WS	SS
144	SNP_GQ0013.BR.1_E01.Contig1.11	0.24	0.47	0.19	Log	0.68	-58.71	0.004	143	WW	WS-	SS+
145	SNP_GQ0014.BR_A18.Contig1.666	0.41	0.33	0.13	Log	0.76	-41.65	0.005	126	WW+	WS+	SS-
146	SNP_GQ0021.B3.r_E11.Contig1.55	0.20	0.26	-0.08	Log	0.76	-60.19	0.005	162	WW+	WS+	SS-
147	SNP_GQ0021.BR.1_O06.Contig1.330	0.17	0.20	0.12	Log	0.50	-78.31	0.001	86	WW	WS-	SS+
148	SNP_GQ0031.TB_K19.Contig2.238	0.11	0.19	-0.06	Exp	0.78	-98.36	0.01	236	WW	WS	SS
149	SNP_GQ0043.TB_G16.Contig2.122	0.26	0.19	-0.05	Log	0.70	-64.44	0.002	84	WW	WS+	SS
150	SNP_GQ0044.B3.r_K18.Contig1.39	0.27	0.33	-0.04	Log	0.75	-60.62	0.003	125	WW	WS	SS
151	SNP_GQ0044.B3.r_N02.Contig1.84	0.22	0.04	0.01	Lin	0.06	-59.18	0	-	WW	WS-	SS
152	SNP_GQ0046.B3_H01.Contig1.506	0.27	0.21	-0.01	Exp	0.22	-46.80	0.001	95	WW-	WS	SS+
153	SNP_GQ0048.B3.r_I01.Contig1.195	0.16	0.19	0.05	Exp	0.78	-83.01	0.012	231	WW+	WS	SS
154	SNP_GQ00612.B3_G14.Contig1.81	0.09	0.33	0.06	Exp	0.55	-116.28	0.003	221	WW-	WS+	SS+
155	SNP_GQ00612.B3_J14.Contig1.472	0.26	0.32	0.01	Log	0.84	-63.46	0.006	159	WW+	WS	SS-
156	SNP_GQ0072.B3.r_I18.Contig1.409	0.19	0.05	0.02	Exp	0.47	-82.96	0.002	138	WW	WS	SS
157	SNP_GQ0074.B3.r_L04.Contig1.77	0.37	0.36	-0.02	Log	0.78	-45.01	0.005	123	WW+	WS	SS-
158	SNP_GQ0178.B7_E07.Contig1.180	0.22	0.31	0.07	Log	0.52	-54.34	0.002	104	WW	WS	SS
159	SNP_GQ02010.B3.r_E06.Contig1.5	0.32	0.15	0.02	Exp	0.59	-54.44	0.004	155	WW	WS+	SS-
160	SS_CO483349.contig3.496	0.46	0.14	-0.08	Exp	0.17	-29.46	0.001	< 0	WW-	WS	SS+
161	WS.2.0.GQ0011.B3.r.O22.2.439	0.34	0.33	-0.09	Exp	0.76	-54.40	0.009	199	WW	WS	SS
162	WS.2.0.GQ0013.BR.1.F05.1.445	0.21	0.19	0.01	Log	0.85	-78.82	0.008	190	WW+	WS+	SS-
163	WS.2.0.GQ0013.BR.1.F24.1.457	0.17	0.47	0.06	Exp	0.39	-71.27	0.003	198	WW-	WS	SS+
164	WS.2.0.GQ0013.BR.1.H07.1.1246	0.20	0.33	0.01	Exp	0.26	-52.82	0.002	166	WW-	WS-	SS+
165	WS.2.0.GQ0014.B3.r.K03.1.350	0.35	0.21	0.01	Log	0.56	-30.56	0.004	135	WW+	WS+	SS-
166	WS.2.0.GQ0015.BR.F19.1.1238	0.21	0.18	0.05	Exp	0.71	-67.28	0.008	214	WW	WS	SS
167	WS.2.0.GQ0021.BR.1.G04.1.641	0.27	0.30	0.00	Log	0.79	-66.42	0.005	163	WW	WS	SS
168	WS.2.0.GQ0021.BR.1.I14.1.917	0.12	0.15	0.04	Log	0.70	-83.52	0.003	173	WW+	WS	SS
169	WS.2.0.GQ0023.B3.r.A10.1.304	0.46	0.06	0.02	Exp	0.26	-43.34	0.001	< 0	WW	WS	SS
170	WS.2.0.GQ0024.B3.r.O14.1.374	0.33	0.19	-0.02	Exp	0.72	-73.13	0.004	154	WW	WS	SS
171	WS.2.0.GQ0024.BR.K09.4.220	0.14	0.19	0.03	Exp	0.73	-114.05	0.003	205	WW	WS-	SS+
172	WS.2.0.GQ0025.BR.I12.1.575	0.14	0.14	0.05	Log	0.74	-83.02	0.005	187	WW	WS-	SS+
173	WS.2.0.GQ0025.BR.J23.1.1534	0.23	0.13	0.00	Exp	0.71	-74.06	0.006	194	WW	WS	SS
174	WS.2.0.GQ0031.B3.r.N13.1.1210	0.41	0.23	-0.03	Exp	0.60	-42.05	0.004	132	WW	WS	SS
175	WS.2.0.GQ0031.TB.F08.2.1213	0.26	0.28	0.03	Exp	0.66	-48.92	0.01	214	WW	WS	SS
176	WS.2.0.GQ0032.TB.K21.1.136	0.22	0.13	0.07	Log	0.53	-67.77	0.002	140	WW	WS-	SS+

177	WS.2.0.GQ0033.TB.D14.1.699	0.36	0.28	-0.10	Log	0.63	-40.89	0.003	68	WW	WS+	SS
178	WS.2.0.GQ0034.B3.r.M12.1.702	0.31	0.17	0.03	Exp	0.79	-66.96	0.007	187	WW+	WS+	SS-
179	WS.2.0.GQ0041.BR.J16.4.199	0.29	0.22	0.03	Log	0.56	-42.60	0.004	148	WW	WS	SS
180	WS.2.0.GQ00410.B3.P11.1.1618	0.38	0.39	0.04	Log	0.68	-26.22	0.005	121	WW+	WS	SS-
181	WS.2.0.GQ00411.B3.J14.1.1171	0.18	0.23	-0.01	Log	0.33	-55.46	0.001	92	WW	WS-	SS+
182	WS.2.0.GQ00412.B3.E01.1.1202	0.20	0.28	-0.08	Log	0.72	-71.44	0.005	180	WW	WS-	SS+
183	WS.2.0.GQ00412.B3.K07.1.1479	0.14	0.13	0.03	Exp	0.47	-86.79	0.002	184	WW	WS	SS
184	WS.2.0.GQ00412.B3.M21.1.371	0.39	0.10	0.02	Exp	0.16	-32.80	0.001	< 0	WW	WS-	SS+
185	WS.2.0.GQ00412.B3.P24.3.109	0.35	0.14	-0.05	Exp	0.49	-37.15	0.004	143	WW+	WS	SS-
186	WS.2.0.GQ0043.BR.J01.2.228	0.19	0.03	-0.12	Lin	0.12	-77.05	0	-	WW	WS	SS
187	WS.2.0.GQ0044.B3.r.L23.1.678	0.33	0.21	0.03	Exp	0.55	-59.63	0.003	140	WW-	WS-	SS+
188	WS.2.0.GQ0045.B3.G10.1.344	0.35	0.31	0.03	Log	0.81	-58.33	0.004	126	WW	WS-	SS+
189	WS.2.0.GQ0045.B3.I14.1.573	0.20	0.37	-0.09	Log	0.55	-63.94	0.003	162	WW-	WS-	SS+
190	WS.2.0.GQ0045.B3.N03.1.416	0.33	0.07	-0.05	Exp	0.22	-45.81	0.001	1	WW	WS+	SS-
191	WS.2.0.GQ0045.B3.N10.1.1522	0.21	0.28	-0.28	Log	0.63	-62.20	0.004	165	WW-	WS+	SS+
192	WS.2.0.GQ0045.B3.P14.1.834	0.29	0.40	0.01	Exp	0.66	-54.76	0.007	199	WW-	WS-	SS+
193	WS.2.0.GQ0046.B3.C03.1.551	0.42	0.05	0.00	Exp	0.25	-52.08	0.001	< 0	WW	WS	SS
194	WS.2.0.GQ0047.B3.F06.1.894	0.41	0.21	0.01	Exp	0.72	-44.38	0.007	160	WW+	WS	SS
195	WS.2.0.GQ0049.B3.A02.1.657	0.32	0.18	-0.01	Exp	0.42	-38.25	0.003	146	WW	WS	SS
196	WS.2.0.GQ0061.B3.r.G16.3.334	0.25	0.29	-0.03	Log	0.80	-71.79	0.003	127	WW-	WS+	SS
197	WS.2.0.GQ00611.B3.H11.1.1029	0.22	0.27	0.03	Log	0.77	-67.36	0.007	187	WW	WS	SS
198	WS.2.0.GQ00611.B3.J20.1.130	0.26	0.12	0.01	Log	0.69	-67.67	0.003	146	WW+	WS+	SS
199	WS.2.0.GQ00611.B3.L10.2.622	0.30	0.31	0.00	Log	0.71	-51.79	0.003	109	WW	WS	SS
200	WS.2.0.GQ00612.B3.L21.1.172	0.19	0.31	0.01	Log	0.70	-78.61	0.003	156	WW-	WS-	SS+
201	WS.2.0.GQ0064.B3.r.I13.1.1236	0.40	0.23	-0.05	Exp	0.42	-36.90	0.003	100	WW-	WS	SS+
202	WS.2.0.GQ0064.TB.H03.2.370	0.42	0.35	0.04	Log	0.73	-35.77	0.005	115	WW+	WS+	SS-
203	WS.2.0.GQ0072.B3.r.P11.1.1000	0.49	0.13	-0.04	Exp	0.57	-48.65	0.002	11	WW-	WS	SS+
204	WS.2.0.GQ0073.TB.L02.2.233	0.29	0.15	-0.05	Exp	0.59	-61.27	0.004	157	WW	WS	SS
205	WS.2.0.GQ0073.TB.M05.1.1123	0.16	0.14	0.02	Exp	0.56	-94.38	0.003	188	WW	WS-	SS
206	WS.2.0.GQ0085.B3.r.O08.1.222	0.25	0.18	0.02	Log	0.42	-56.48	0.001	39	WW	WS	SS
207	WS.2.0.GQ0131.B3.E24.1.1764	0.33	0.14	0.00	Log	0.46	-36.59	0.002	15	WW+	WS+	SS-
208	WS.2.0.GQ0133.B7.1.D11.1.1584	0.15	0.22	-0.10	Log	0.77	-96.92	0.003	163	WW-	WS-	SS+
209	WS.2.0.GQ0134.B7.1.L07.1.1358	0.45	0.38	0.00	Exp	0.49	-13.31	0.006	140	WW	WS+	SS+
210	WS.2.0.GQ0161.TB.B13.1.1161	0.20	0.09	0.02	Log	0.75	-87.42	0.002	127	WW+	WS+	SS
211	WS.2.0.GQ0163.TB.B18.1.1080	0.28	0.37	0.08	Log	0.63	-49.22	0.004	148	WW	WS-	SS
212	WS.2.0.GQ0165.B3.F11.2.34	0.43	0.06	0.03	Lin	0.14	-43.76	0	-	WW	WS	SS
213	WS.2.0.GQ0168.B3.J12.1.1192	0.17	0.28	0.05	Log	0.74	-85.35	0.004	172	WW	WS-	SS
214	WS.2.0.GQ0168.B3.N16.1.556	0.17	0.26	0.00	Log	0.51	-75.20	0.001	108	WW-	WS-	SS+
215	WS.2.0.GQ0173.TB.A04.4.594	0.30	0.11	0.00	Exp	0.62	-53.39	0.005	166	WW+	WS+	SS-
216	WS.2.0.GQ0175.B7.K18.1.223	0.09	0.12	-0.04	Log	0.60	-125.84	0.001	140	WW	WS-	SS
217	WS.2.0.GQ0177.B7.K12.1.501	0.24	0.36	-0.01	Log	0.82	-75.92	0.004	141	WW	WS	SS
218	WS.2.0.GQ0178.B7.A11.1.460	0.35	0.25	-0.09	Exp	0.53	-43.66	0.004	149	WW	WS	SS
219	WS.2.0.GQ0187.T24.A06.1.1353	0.19	0.26	-0.05	Exp	0.46	-73.37	0.003	182	WW-	WS-	SS+
220	WS.2.0.GQ0193.B3.r.A11.3.420	0.11	0.15	0.03	Exp	0.50	-103.63	0.002	200	WW-	WS-	SS+
221	WS.2.0.GQ0195.B3.D14.1.174	0.39	0.23	0.05	Log	0.77	-48.56	0.005	128	WW+	WS	SS-
222	WS.2.0.GQ0197.B3.G24.1.764	0.14	0.32	0.03	Exp	0.64	-111.89	0.003	210	WW-	WS-	SS+
223	WS.2.0.GQ0198.B3.P03.1.170	0.32	0.10	0.00	Exp	0.52	-55.03	0.003	129	WW	WS	SS
224	WS.2.0.GQ02010.B3.r.N03.1.1528	0.18	0.17	0.03	Log	0.63	-61.83	0.003	144	WW	WS	SS
225	WS.2.0.GQ02010.B7.H23.1.251	0.49	0.05	-0.07	Lin	0.21	-46.99	0.001	-	WW+	WS	SS-
226	WS.2.0.GQ02011.B3.r.B09.2.447	0.15	0.06	-0.01	Lin	0.09	-85.63	0	-	WW	WS	SS
227	WS.2.0.GQ02013.TB.O16.1.231	0.20	0.11	0.08	Exp	0.22	-56.14	0.001	112	WW	WS	SS
228	WS.2.0.GQ02014.B3.r.H08.1.644	0.19	0.20	-0.09	Log	0.49	-63.86	0.002	116	WW	WS	SS
229	WS.2.0.GQ02015.TB.B10.1.1440	0.28	0.13	0.01	Log	0.62	-48.63	0.002	89	WW	WS-	SS+
230	WS.2.0.GQ02016.B3.r.F09.1.1121	0.28	0.04	-0.02	Lin	0.10	-58.42	0	-	WW+	WS-	SS-
231	WS.2.0.GQ0202.B3.O09.3.261	0.26	0.22	0.00	Log	0.74	-61.13	0.004	152	WW+	WS+	SS-
232	WS.2.0.GQ0204.B3.H10.1.662	0.40	0.25	-0.12	Log	0.61	-41.90	0.002	18	WW	WS+	SS
233	WS.2.0.GQ0204.B3.P14.2.925	0.50	0.08	0.04	Lin	0.25	-36.60	0	-	WW-	WS	SS+
234	WS.2.0.GQ0206.B3.P13.1.173	0.36	0.27	-0.09	Log	0.67	-36.72	0.003	74	WW+	WS+	SS-
235	WS.2.0.GQ0208.B3.P21.1.535	0.30	0.38	0.01	Log	0.68	-39.84	0.006	159	WW+	WS	SS-
236	WS.2.0.GQ0222.B7.B17.1.379	0.37	0.11	0.05	Exp	0.45	-56.24	0.002	65	WW-	WS-	SS+
237	WS.2.0.GQ0222.B7.P03.4.50	0.22	0.32	-0.03	Log	0.55	-40.59	0.003	136	WW	WS	SS
238	WS.2.0.GQ0226.B7.D08.1.418	0.33	0.08	0.01	Exp	0.41	-57.95	0.002	74	WW	WS	SS

239	WS.2.0.GQ0226.B7.D16.1.397	0.26	0.19	-0.04	Log	0.74	-72.08	0.003	114	WW	WS	SS
240	WS.2.0.GQ02511.B3.A11.2.431	0.26	0.21	-0.03	Exp	0.66	-52.44	0.008	201	WW+	WS	SS-
241	WS.2.0.GQ0253.B7.G03.1.1020	0.50	0.07	0.01	Lin	0.33	-38.18	-0	-	WW-	WS	SS+
242	WS.2.0.GQ0255.B3.P02.1.233	0.18	0.24	-0.05	Log	0.52	-81.11	0.001	101	WW-	WS-	SS+
243	WS.2.0.GQ0258.B3.B12.1.786	0.25	0.28	0.00	Exp	0.66	-60.38	0.007	203	WW	WS	SS
244	WS.2.0.GQ02801.B7.O14.1.512	0.37	0.17	-0.03	Log	0.29	-39.78	0.001	< 0	WW-	WS	SS+
245	WS.2.0.GQ02805.B7.J24.2.535	0.28	0.16	-0.02	Exp	0.35	-42.32	0.003	141	WW-	WS-	SS+
246	WS.2.0.GQ02807.B7.A19.1.869	0.45	0.04	-0.02	Lin	0.03	-36.48	0	-	-	-	-
247	WS.2.0.GQ02808.B7.O03.2.818	0.49	0.05	-0.03	Exp	0.18	-36.65	0.001	< 0	WW	WS	SS
248	WS.2.0.GQ02815.B7.M19.1.534	0.16	0.25	-0.08	Log	0.27	-63.02	0.001	76	WW-	WS-	SS+
249	WS.2.0.GQ02819.B7.K02.2.592	0.23	0.20	0.13	Log	0.47	-40.16	0.002	85	WW+	WS+	SS-
250	WS.2.0.GQ02823.SP6.H05.1.827	0.42	0.18	-0.01	Exp	0.49	-31.34	0.004	110	WW+	WS+	SS-
251	WS.2.0.GQ02827.B7.B09.1.298	0.26	0.34	0.05	Log	0.74	-46.72	0.005	149	WW+	WS	SS
252	WS.2.0.GQ02830.B7.N19.1.816	0.19	0.30	-0.04	Log	0.76	-81.91	0.003	161	WW	WS-	SS+
253	WS.2.0.GQ02903.B7.B21.1.1399	0.23	0.37	-0.10	Log	0.60	-59.93	0.005	151	WW-	WS-	SS+
254	WS.2.0.GQ02905.B7.P10.1.849	0.33	0.17	0.02	Exp	0.35	-56.54	0.002	72	WW-	WS	SS+
255	WS.2.0.GQ03101.B7.A12.1.268	0.22	0.26	-0.05	Exp	0.80	-77.33	0.011	222	WW	WS	SS
256	WS.2.0.GQ03101.B7.M09.1.229	0.35	0.07	-0.05	Exp	0.51	-57.96	0.002	87	WW+	WS+	SS-
257	WS.2.0.GQ03105.B7.N08.1.636	0.29	0.25	0.01	Log	0.74	-71.10	0.002	81	WW	WS	SS
258	WS.2.0.GQ03108.B7.H08.1.831	0.31	0.27	0.04	Log	0.76	-44.31	0.005	144	WW+	WS	SS-
259	WS.2.0.GQ03115.B7.P17.1.1218	0.31	0.15	-0.01	Exp	0.65	-56.52	0.005	168	WW	WS	SS
260	WS.2.0.GQ03118.B7.C03.1.798	0.27	0.35	-0.01	Log	0.92	-83.57	0.007	161	WW	WS	SS
261	WS.2.0.GQ03125.B7.D11.2.871	0.27	0.31	0.05	Log	0.77	-60.11	0.004	140	WW	WS-	SS+
262	WS.2.0.GQ03126.B7.M13.1.633	0.16	0.18	0.02	Exp	0.79	-110.53	0.004	204	WW	WS-	SS
263	WS.2.0.GQ03226.B7.M05.1.485	0.33	0.27	0.07	Log	0.52	-52.01	0.002	34	WW-	WS-	SS+
264	WS.2.0.GQ03409.B7.H11.1.187	0.37	0.14	-0.04	Exp	0.62	-50.20	0.004	140	WW	WS	SS
265	WS.2.0.GQ03516.B7.I16.1.170	0.47	0.08	-0.03	Log	0.64	-49.13	0.002	< 0	WW+	WS+	SS-
266	WS.2.0.GQ03614.B7.C22.1.141	0.47	0.15	0.03	Exp	0.59	-28.93	0.005	101	WW+	WS+	SS-
267	WS00841.B21_O11.contig1.NC1.14	0.38	0.07	-0.08	Lin	0.03	-32.77	0	-	WW	WS	SS
268	WS01026.B21_I20.contig1.C1.288	0.12	0.16	-0.05	Exp	0.25	-82.09	0.001	156	WW-	WS	SS+

^a Regression type used in geographic cline analysis, where Log is logistic, Lin is linear and Exp is exponential

^b Genomic cline analysis indicating over (+) or underrepresentation (-) of individual genotypic classes, where WW are interclass homozygotes for white spruce; WS, interclass heterozygotes; and SS interclass