Supplementary Data

Supplementary Data SD1. – PCR conditions for SNP loci.

Assay	SNP Type	Minor allele frequency	Magnesium concentration (mM)	*T*a	No. of cycles
BpADH2S156	C/G	0.01	1.5	62	40
BpADRBK1Y117	C/T	0.133	1.5	60	40
BpCGAS138	C/G	0.286	1.8	60	50
BpCKY126	C/T	0.242	1.8	62	40
BpCOL10A1K90	T/G	0.193	1.8	58	40
BpCOL3A1M72	A/C	0.449	2.5	58	40
BpCYP1A1R136	A/G	0.033	2.5	62	40
BpEPOY143	C/T	0.01	1.8	60	40
BpESDM147	A/C	0.29	2.5	58	40
BpESDY121	C/T	0.431	1.5	58	40
BpFESY21	C/T	0.03	1.8	58	40
BpFSHBM226	C/A	0.248	1.5	58	40
BpFSHBY120	C/T	0.11	1.5	58	40
BpGLUT2S255	G/C	0.1633	1.5	60	40
BpGLUT2W136	A/T	0.117	1.5	60	40
BpLAPTM4AM476	A/C	0.191	2.5	58	40
BpRDSR128	G/A	0.0671	1.5	58	40
BpRDSY373	T/C	0.124	1.8	60	40
BpRHO1R172	G/A	0.0839	1.8	58	40
BpTPI1W157	A/T	0.138	2.5	62	40

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Supplementary Data SD2. – Multiplex and Amplifluor SNP PCR primers.

Locus	Multiplex Oligo Name	Multiplex Oligo Sequence	Amplifluour Oligo Name	Amplifluor Oligo Sequence
BpADH2S156	BpADH2S156E	TCCTTATGCAGCCAAGGAAT	BpADH2S156C	*GCCAAGGAATTTGCACATCAG
BpADH2S156	BpADH2S156R	ATGAGGGTATGAGACAGGAGT	BpADH2S156G	**GCCAAGGAATTTGCACATCAC
BpADRBK1Y117	BpADRBK1Y117E	GCAGCAGGAGGTAGCAGAGA	BpADRBK1Y117C	*AGGAAGGTGAGGGTCGGC
BpADRBK1Y117	BpADRBK1Y117R	CTGAGCCTGTTTCCGATCTTT	BpADRBK1Y117T	**GAGGAAGGTGAGGGTCGGT
BpCGAS138	BpCGAS138E	CTTGCAGTCAACACCACCTG	BpCGAS138C	**TCCTGGAAATGGCTCAAAACAAAAAATGATC
BpCGAS138	BpCGAS138R	CCATCCAATGATTGAATGGTACTT	BpCGAS138G	*CCTGGAAATGGCTCAAAACAAAAAATGATG
BpCKY126	BpCKY126E	CCCTTGGATTCCTACCCCTA	BpCKY126C	**ACACCCTGTCCCTCCGAG
BpCKY126	BpCKY126R	AAATACACCCACAACCCGGA	BpCKY126T	*TCACACCCTGTCCCTCCGAA
BpCOL10A1K90	BpCOL10A1K90E	ACAGGCAACAGCATTATGACC	BpCOL10A1K90T	*CAACAGCATTATGACCCAAGAACT
BpCOL10A1K90	BpCOL10A1K90R	TGCCGTTCTTATACAGGCCC	BpCOL10A1K90G	**CAACAGCATTATGACCCAAGAACG
BpCOL3A1M72	BpCOL3A1M72E	AGGGCCTCCCGTAAGTACA	BpCOL3A1M72A	*ACATCTCATTTTACAAGTCCAGAGAA
BpCOL3A1M72	BpCOL3A1M72R	AGCCTAGTTCAAACTGTGCATT	BpCOL3A1M72C	**ACATCTCATTTTACAAGTCCAGAGAC
BpCYP1A1R136	BpCYP1A1R136E	CTCCTTGCTCACGTGCTCTT	BpCYP1A1R136A	*CTCACGTGCTCTTCCAGGTAA
BpCYP1A1R136	BpCYP1A1R136R	CCAGAATGCCCTGAAGAGTTTT	BpCYP1A1R136G	**TTCACGTGCTCTTCCAGGTAG
BpEPOY143	BpEPOY143E	CCCAGGATCTTCCACAGAAC	BpEPOY143C	**CAGGATCTTCCACAGAACTCAC
BpEPOY143	BpEPOY143R	TGCCAGGTTCCTGGATCTT	BpEPOY143T	*CCAGGATCTTCCACAGAACTCAT
			BpESDM147FC	*ATTTCAAGGGGTTTGTGGGGC
BpESDM147	BpESDM147R	CCAATGAGAAACCACTGGGAT	BpESDM147FA	**GAATTTCAAGGGGTTTGTGGGGA
			BpESDY121FT	**CCCACAAACCCCTTGAAATTCCCAA
BpESDY121	BpESDY121R	CTTTCAAAGATTGAAATTAAGATACTGTTGTT	BpESDY121FC	*CCACAAACCCCTTGAAATTCCCAG
BpF9R139	BpF9R139E	GAAGAAGCACGAGAAGTTTTTGA	BpF9R139A	**ACACTGAGAAAACTGTGAGTATTTCCA
BpF9R139	BpF9R139R	TGCTCTGCATCTGAAGGATGTT	BpF9R139G	*CACTGAGAAAACTGTGAGTATTTCCG
BpFESY21	BpFESY21E	ACCAGGGTGTTGTCAGCTCT	BpFESY21C	**TTGTCAGCTCTCAGGCGTCCG
BpFESY21	BpFESY21R	AACTTTGGCGAAGTGTTCA	BpFESY21T	*TTGTCAGCTCTCAGGCGTCCA
BpFSHBM226	BpFSHBM226R	AGAAGGGAGCTCCAGGAAT	BpFSHBM226FC	*TGGAACCAGACCTAGAATACAGG
BpFSHBM226	BpFSHBE	GAAAGCAACCCCATGTCTGT	BpFSHBM226FA	**GGAACCAGACCTAGAATACAGT
BpFSHBY120	BpFSHBY120R	TCCAAGACGTCTGTGTGTACAT	BpFSHBY120FT	**CAGTGGTTTGCAGCCTGGA

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			BpFSHBY120FC	*AGTGGTTTGCAGCCTGGG
BpGLUT2S255	BpGLUT2S255E	CCACAGAAGTCCTGCACAGA	BpGLUT2S255C	**ATTGCTAAAGCAGCAGGC
BpGLUT2S255	BpGLUT2S255R	GGTTCATGGTGGCTGAGTTTT	BpGLUT2S255G	*GCTATTGCTAAAGCAGCAGGG
BpGLUT2W136	BpGLUT2W136R	GTGTTTCCAGTACATTGCGGTAA	BpGLUT2W136A	*GTTCCAATTAGCAGCTCTTCAACCTTA
			BpGLUT2W136T	**TTCCAATTAGCAGCTCTTCAACCTTT
BpLAPTM4AM476	BpLAPTM4AM476E	CCTTCTTGTTGCTGTGTCTCC	BpLAPTM4AM476A	*TAGAGACAGCTTCCAGGGTATGT
BpLAPTM4AM476	BpLAPTM4AM476R	GCATTTCCAACCACTGCCT	BpLAPTM4AM476C	**TAGAGACAGCTTCCAGGGTATGG
BpNF1K154	BpNF1K154E	CCTGATATGGACAGACAGATGC	BpNF1K154G	**GACAGATGCAAATTACTAACATGGTCTTTCG
BpNF1K154	BpNF1K154R	CTGGCATGTAAGACAAGTGGAA	BpNF1K154T	*CAGACAGATGCAAATTTACTAACATGGTCTTTCT
BpPLPY427	BpPLPY427R	AGGAACAGGAGAGGCTTAGTA	BpPLPY427FT	*CTGCTTCTCTTGGTTTACCACACT
BpPLPY427	BpPLPY427E	TTGCTTTGTCCCACATGTTT	BpPLPY427FC	**TGCTTCTCTTGGTTTACCACACC
BpRDSR128	BpRDSR128E	GTCCCGGTAGAACTTCATGC	BpRDSR128A	**TCATGCCATTCTTGAGCCCA
BpRDSR128	BpRDSR128R	GTCCTCTTCAACATTGTCCTCTT	BpRDSR128G	*TTCATGCCATTCTTGAGCCCG
BpRDSY373	BpRDSY373E	CACAAAATGGCTCTCGGAAT	BpRDSY373C	**GCTCTCGGAATTGTCCATCAC
BpRDSY373	BpRDSY373R	ATCTTCGGCTTAGGGCTGTT	BpRDSY373T	*TGGCTCTCGGAATTGTCCATCAT
BpRHO1R172	BpRHO1R172E	GCAGCTGGTCTTCACAGTCA	BpRHO1R172A	**AACATCAGGCCCTGTGTCCCCA
BpRHO1R172	BpRHO1R172R	ACCATGCGAGTGACCTCCTT	BpRHO1R172G	*AACATCAGGCCCTGTGTCCCCG
BpTPI1W157	BpTPI1W157E	CTCCCCTTTCCTGCATCAT	BpTPI1W157A	*CTGCATCATTCGTGGGGATCT
BpTPI1W157	BpTPI1W157R	TACGGAGGCACAGAGGGT	BpTPI1W157T	**GCATCATTCGTGGGGATCAA

Amplifluor tag sequences:
*GAAGGTCGGAGTCAACGGATT
**GAAGGTGACCAAGTTCATGCT

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Supplementary Data SD3. – Genetic samples used in analyses. GenBank accession numbers for sequences published Berube et al 1998 (n = 319 samples, 51 haplotypes) are AF119956 - AF120006. 57 sequences from South Georgia from Sremba et al 2015 are archived at Dryad (http://doi.org/10.5061/dryad.c8k6q).

ID	GenBank Accession Number	Ocean Basin	Control Region	Mitogenome	SNPs	Reference
761	KC572708	N.Atl	Y	Y	Y	Archer et al 2013
2821	KC572709	N.Atl	Y	Y	Y	Archer et al 2013
7835	KC572714	N.Atl	Y	Y	Y	Archer et al 2013
79781	KC572825	N.Atl	Y	Y	Y	Archer et al 2013
88576	KC572826	N.Atl	Y	Y	Y	Archer et al 2013
88580	KC572827	N.Atl	Y	Y	Y	Archer et al 2013
88585	KC572828	N.Atl	Y	Y	Y	Archer et al 2013
88586	KC572829	N.Atl	Y	Y	Y	Archer et al 2013
94604	KC572856	N.Atl	Y	Y	Y	Archer et al 2013
94605	KC572857	N.Atl	Y	Y	Y	Archer et al 2013
94606	KC572858	N.Atl	Y	Y	Y	Archer et al 2013
94607	KC572859	N.Atl	Y	Y	Y	Archer et al 2013
94608	KC572860	N.Atl	Y	Y	Y	Archer et al 2013
7832	KC582037	N.Atl	Y	N	N	this study
7833	KC582038	N.Atl	Y	N	N	this study
7834	KC582039	N.Atl	Y	N	N	this study
7837	KC582040	N.Atl	Y	N	N	this study
44484	KC582151	N.Atl	Y	N	Y	this study
88569	KC582216	N.Atl	Y	N	N	this study
88570	KC582217	N.Atl	Y	N	N	this study
88571	KC582218	N.Atl	Y	N	N	this study
88572	KC582219	N.Atl	Y	N	N	this study
88573	KC582220	N.Atl	Y	N	N	this study
88574	KC582221	N.Atl	Y	N	N	this study
88575	KC582222	N.Atl	Y	N	N	this study

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88577	KC582223	N.Atl	Y	N	N	this study
88578	KC582224	N.Atl	Y	N	N	this study
88579	KC582225	N.Atl	Y	N	N	this study
88581	KC582226	N.Atl	Y	N	N	this study
88582	KC582227	N.Atl	Y	N	N	this study
88583	KC582228	N.Atl	Y	N	N	this study
88584	KC582229	N.Atl	Y	N	N	this study
88587	KC582230	N.Atl	Y	N	N	this study
NC_001321	NC001321	N.Atl	Y	Y	N	Arnason et al 1991
Gulf of Maine		N.Atl	Y	N	N	Berube et al 1998
Gulf of St. Lawrence		N.Atl	Y	N	N	Berube et al 1998
Iceland		N.Atl	Y	N	N	Berube et al 1998
Ligurian Sea		N.Atl	Y	N	N	Berube et al 1998
Spain		N.Atl	Y	N	N	Berube et al 1998
West Greenland		N.Atl	Y	N	N	Berube et al 1998
4632	KC572710	N.Pac	Y	Y	Y	Archer et al 2013
4767	KC572711	N.Pac	Y	Y	Y	Archer et al 2013
6224	KC572712	N.Pac	Y	Y	Y	Archer et al 2013
6253	KC572713	N.Pac	Y	Y	Y	Archer et al 2013
10744	KC572715	N.Pac	Y	Y	Y	Archer et al 2013
23640	KC572716	N.Pac	Y	Y	Y	Archer et al 2013
24014	KC572717	N.Pac	Y	Y	Y	Archer et al 2013
25376	KC572718	N.Pac	Y	Y	Y	Archer et al 2013
25399	KC572719	N.Pac	Y	Y	Y	Archer et al 2013
25400	KC572720	N.Pac	Y	Y	Y	Archer et al 2013
25404	KC572721	N.Pac	Y	Y	Y	Archer et al 2013
25519	KC572722	N.Pac	Y	Y	Y	Archer et al 2013
25520	KC572723	N.Pac	Y	Y	Y	Archer et al 2013
26294	KC572724	N.Pac	Y	Y	Y	Archer et al 2013

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26295	KC572725	N.Pac	Y	Y	Y	Archer et al 2013
28409	KC572726	N.Pac	Y	Y	Y	Archer et al 2013
28506	KC572727	N.Pac	Y	Y	Y	Archer et al 2013
29875	KC572728	N.Pac	Y	Y	Y	Archer et al 2013
29941	KC572729	N.Pac	Y	Y	Y	Archer et al 2013
29950	KC572730	N.Pac	Y	Y	Y	Archer et al 2013
30475	KC572731	N.Pac	Y	Y	Y	Archer et al 2013
30477	KC572732	N.Pac	Y	Y	Y	Archer et al 2013
30478	KC572733	N.Pac	Y	Y	Y	Archer et al 2013
35292	KC572734	N.Pac	Y	Y	Y	Archer et al 2013
35297	KC572735	N.Pac	Y	Y	Y	Archer et al 2013
37552	KC572736	N.Pac	Y	Y	Y	Archer et al 2013
37553	KC572737	N.Pac	Y	Y	Y	Archer et al 2013
37554	KC572738	N.Pac	Y	Y	Y	Archer et al 2013
37558	KC572739	N.Pac	Y	Y	Y	Archer et al 2013
37559	KC572740	N.Pac	Y	Y	Y	Archer et al 2013
37561	KC572741	N.Pac	Y	Y	Y	Archer et al 2013
37563	KC572742	N.Pac	Y	Y	Y	Archer et al 2013
37587	KC572743	N.Pac	Y	Y	N	Archer et al 2013
37593	KC572744	N.Pac	Y	Y	N	Archer et al 2013
43537	KC572746	N.Pac	Y	Y	Y	Archer et al 2013
43538	KC572747	N.Pac	Y	Y	Y	Archer et al 2013
43539	KC572748	N.Pac	Y	Y	Y	Archer et al 2013
43540	KC572749	N.Pac	Y	Y	Y	Archer et al 2013
43545	KC572750	N.Pac	Y	Y	Y	Archer et al 2013
43547	KC572751	N.Pac	Y	Y	Y	Archer et al 2013
43553	KC572752	N.Pac	Y	Y	Y	Archer et al 2013
43554	KC572753	N.Pac	Y	Y	Y	Archer et al 2013
43555	KC572754	N.Pac	Y	Y	Y	Archer et al 2013

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43558	KC572755	N.Pac	Y	Y	Y	Archer et al 2013
43559	KC572756	N.Pac	Y	Y	Y	Archer et al 2013
43560	KC572757	N.Pac	Y	Y	Y	Archer et al 2013
43567	KC572758	N.Pac	Y	Y	Y	Archer et al 2013
43574	KC572759	N.Pac	Y	Y	Y	Archer et al 2013
43577	KC572760	N.Pac	Y	Y	Y	Archer et al 2013
43617	KC572761	N.Pac	Y	Y	Y	Archer et al 2013
43618	KC572762	N.Pac	Y	Y	Y	Archer et al 2013
43658	KC572763	N.Pac	Y	Y	Y	Archer et al 2013
43786	KC572764	N.Pac	Y	Y	Y	Archer et al 2013
43803	KC572765	N.Pac	Y	Y	Y	Archer et al 2013
43809	KC572766	N.Pac	Y	Y	Y	Archer et al 2013
43811	KC572767	N.Pac	Y	Y	Y	Archer et al 2013
43813	KC572768	N.Pac	Y	Y	Y	Archer et al 2013
43827	KC572769	N.Pac	Y	Y	Y	Archer et al 2013
43834	KC572770	N.Pac	Y	Y	Y	Archer et al 2013
43836	KC572771	N.Pac	Y	Y	Y	Archer et al 2013
43837	KC572772	N.Pac	Y	Y	Y	Archer et al 2013
43843	KC572773	N.Pac	Y	Y	Y	Archer et al 2013
43924	KC572774	N.Pac	Y	Y	Y	Archer et al 2013
43925	KC572775	N.Pac	Y	Y	Y	Archer et al 2013
43936	KC572776	N.Pac	Y	Y	Y	Archer et al 2013
43944	KC572777	N.Pac	Y	Y	Y	Archer et al 2013
43957	KC572778	N.Pac	Y	Y	Y	Archer et al 2013
43965	KC572779	N.Pac	Y	Y	Y	Archer et al 2013
51409	KC572780	N.Pac	Y	Y	Y	Archer et al 2013
52780	KC572781	N.Pac	Y	Y	Y	Archer et al 2013
62006	KC572783	N.Pac	Y	Y	Y	Archer et al 2013
62286	KC572784	N.Pac	Y	Y	Y	Archer et al 2013

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62952	KC572785	N.Pac	Y	Y	Y	Archer et al 2013
62953	KC572786	N.Pac	Y	Y	Y	Archer et al 2013
67227	KC572787	N.Pac	Y	Y	Y	Archer et al 2013
67243	KC572788	N.Pac	Y	Y	Y	Archer et al 2013
67300	KC572789	N.Pac	Y	Y	Y	Archer et al 2013
67327	KC572790	N.Pac	Y	Y	Y	Archer et al 2013
73346	KC572807	N.Pac	Y	Y	Y	Archer et al 2013
73347	KC572808	N.Pac	Y	Y	Y	Archer et al 2013
73349	KC572809	N.Pac	Y	Y	Y	Archer et al 2013
76417	KC572810	N.Pac	Y	Y	Y	Archer et al 2013
76719	KC572811	N.Pac	Y	Y	Y	Archer et al 2013
76724	KC572812	N.Pac	Y	Y	Y	Archer et al 2013
76733	KC572813	N.Pac	Y	Y	Y	Archer et al 2013
76734	KC572814	N.Pac	Y	Y	Y	Archer et al 2013
76735	KC572815	N.Pac	Y	Y	Y	Archer et al 2013
76795	KC572816	N.Pac	Y	Y	Y	Archer et al 2013
76796	KC572817	N.Pac	Y	Y	N	Archer et al 2013
76841	KC572818	N.Pac	Y	Y	Y	Archer et al 2013
76850	KC572819	N.Pac	Y	Y	Y	Archer et al 2013
76892	KC572820	N.Pac	Y	Y	Y	Archer et al 2013
76902	KC572821	N.Pac	Y	Y	Y	Archer et al 2013
76903	KC572822	N.Pac	Y	Y	Y	Archer et al 2013
76963	KC572823	N.Pac	Y	Y	Y	Archer et al 2013
79754	KC572824	N.Pac	Y	Y	Y	Archer et al 2013
93840	KC572855	N.Pac	Y	Y	Y	Archer et al 2013
1862	KC582023	N.Pac	Y	N	N	this study
2331	KC582024	N.Pac	Y	N	N	this study
5791	KC582025	N.Pac	Y	N	N	this study
5792	KC582026	N.Pac	Y	N	N	this study

5819	KC582027	N.Pac	Y	N	N	this study
5820	KC582028	N.Pac	Y	N	N	this study
5821	KC582029	N.Pac	Y	N	N	this study
5822	KC582030	N.Pac	Y	N	N	this study
5824	KC582031	N.Pac	Y	N	N	this study
6248	KC582032	N.Pac	Y	N	N	this study
6249	KC582033	N.Pac	Y	N	N	this study
6254	KC582034	N.Pac	Y	N	N	this study
6255	KC582035	N.Pac	Y	N	N	this study
6256	KC582036	N.Pac	Y	N	N	this study
8644	KC582041	N.Pac	Y	N	N	this study
10743	KC582042	N.Pac	Y	N	N	this study
11202	KC582043	N.Pac	Y	N	N	this study
14336	KC582044	N.Pac	Y	N	N	this study
15896	KC582045	N.Pac	Y	N	N	this study
15897	KC582046	N.Pac	Y	N	N	this study
24713	KC582047	N.Pac	Y	N	N	this study
24798	KC582048	N.Pac	Y	N	Y	this study
24889	KC582049	N.Pac	Y	N	N	this study
25397	KC582050	N.Pac	Y	N	N	this study
25401	KC582051	N.Pac	Y	N	N	this study
25402	KC582052	N.Pac	Y	N	Y	this study
25403	KC582053	N.Pac	Y	N	N	this study
25518	KC582054	N.Pac	Y	N	N	this study
26247	KC582055	N.Pac	Y	N	N	this study
26277	KC582056	N.Pac	Y	N	N	this study
26350	KC582057	N.Pac	Y	N	N	this study
28505	KC582058	N.Pac	Y	N	Y	this study
28507	KC582059	N.Pac	Y	N	N	this study

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28533	KC582060	N.Pac	Y	N	Y	this study
28534	KC582061	N.Pac	Y	N	N	this study
28535	KC582062	N.Pac	Y	N	N	this study
29877	KC582063	N.Pac	Y	N	N	this study
29938	KC582064	N.Pac	Y	N	N	this study
29939	KC582065	N.Pac	Y	N	N	this study
29940	KC582066	N.Pac	Y	N	N	this study
29943	KC582067	N.Pac	Y	N	N	this study
29944	KC582068	N.Pac	Y	N	N	this study
29945	KC582069	N.Pac	Y	N	N	this study
29947	KC582070	N.Pac	Y	N	N	this study
29948	KC582071	N.Pac	Y	N	N	this study
29949	KC582072	N.Pac	Y	N	N	this study
29952	KC582073	N.Pac	Y	N	N	this study
29953	KC582074	N.Pac	Y	N	N	this study
29954	KC582075	N.Pac	Y	N	N	this study
30536	KC582076	N.Pac	Y	N	N	this study
30537	KC582077	N.Pac	Y	N	N	this study
30538	KC582078	N.Pac	Y	N	N	this study
31908	KC582079	N.Pac	Y	N	N	this study
31909	KC582080	N.Pac	Y	N	N	this study
31910	KC582081	N.Pac	Y	N	N	this study
35290	KC582082	N.Pac	Y	N	N	this study
35291	KC582083	N.Pac	Y	N	N	this study
35293	KC582084	N.Pac	Y	N	N	this study
35294	KC582085	N.Pac	Y	N	N	this study
35295	KC582086	N.Pac	Y	N	N	this study
35296	KC582087	N.Pac	Y	N	N	this study
35356	KC582088	N.Pac	Y	N	N	this study

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37549	KC582089	N.Pac	Y	N	N	this study
37550	KC582090	N.Pac	Y	N	N	this study
37551	KC582091	N.Pac	Y	N	N	this study
37555	KC582092	N.Pac	Y	N	N	this study
37556	KC582093	N.Pac	Y	N	N	this study
37557	KC582094	N.Pac	Y	N	N	this study
37562	KC582095	N.Pac	Y	N	N	this study
37564	KC582096	N.Pac	Y	N	N	this study
37565	KC582097	N.Pac	Y	N	N	this study
37566	KC582098	N.Pac	Y	N	N	this study
37574	KC582099	N.Pac	Y	N	N	this study
37575	KC582100	N.Pac	Y	N	N	this study
37576	KC582101	N.Pac	Y	N	N	this study
37578	KC582102	N.Pac	Y	N	N	this study
37579	KC582103	N.Pac	Y	N	N	this study
37580	KC582104	N.Pac	Y	N	N	this study
37581	KC582105	N.Pac	Y	N	N	this study
37582	KC582106	N.Pac	Y	N	N	this study
37585	KC582107	N.Pac	Y	N	N	this study
37588	KC582108	N.Pac	Y	N	N	this study
37589	KC582109	N.Pac	Y	N	N	this study
37591	KC582110	N.Pac	Y	N	N	this study
37592	KC582111	N.Pac	Y	N	N	this study
37594	KC582112	N.Pac	Y	N	N	this study
37595	KC582113	N.Pac	Y	N	N	this study
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123923	KC582295	N.Pac	Y	N	N	this study
123924	KC582296	N.Pac	Y	N	N	this study
CRI002060	MG877685	N.Pac	Y	N	N	Kim et al 2018
CRI004141	MG877686	N.Pac	Y	N	N	Kim et al 2018
CRI006918	MG877688	N.Pac	Y	N	N	Kim et al 2018
Sea of Cortez		N.Pac	Y	N	N	Berube et al 1998
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72979	KC572792	S.Hem	Y	Y	Y	Archer et al 2013
72980	KC572793	S.Hem	Y	Y	Y	Archer et al 2013
72981	KC572794	S.Hem	Y	Y	Y	Archer et al 2013
72982	KC572795	S.Hem	Y	Y	Y	Archer et al 2013
72983	KC572796	S.Hem	Y	Y	Y	Archer et al 2013
72984	KC572797	S.Hem	Y	Y	Y	Archer et al 2013
72985	KC572798	S.Hem	Y	Y	Y	Archer et al 2013
72986	KC572799	S.Hem	Y	Y	Y	Archer et al 2013
72987	KC572800	S.Hem	Y	Y	Y	Archer et al 2013

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72988	KC572801	S.Hem	Y	Y	Y	Archer et al 2013
72989	KC572802	S.Hem	Y	Y	Y	Archer et al 2013
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72991	KC572804	S.Hem	Y	Y	Y	Archer et al 2013
72992	KC572805	S.Hem	Y	Y	Y	Archer et al 2013
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91293	KC572831	S.Hem	Y	Y	Y	Archer et al 2013
91294	KC572832	S.Hem	Y	Y	Y	Archer et al 2013
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91296	KC572834	S.Hem	Y	Y	Y	Archer et al 2013
91297	KC572835	S.Hem	Y	Y	Y	Archer et al 2013
91299	KC572836	S.Hem	Y	Y	Y	Archer et al 2013
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91301	KC572838	S.Hem	Y	Y	Y	Archer et al 2013
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91308	KC572844	S.Hem	Y	Y	Y	Archer et al 2013
91310	KC572845	S.Hem	Y	Y	Y	Archer et al 2013
91311	KC572846	S.Hem	Y	Y	Y	Archer et al 2013
91312	KC572847	S.Hem	Y	Y	Y	Archer et al 2013
91313	KC572848	S.Hem	Y	Y	Y	Archer et al 2013
91315	KC572849	S.Hem	Y	Y	Y	Archer et al 2013
91316	KC572850	S.Hem	Y	Y	Y	Archer et al 2013
91317	KC572851	S.Hem	Y	Y	Y	Archer et al 2013
91318	KC572852	S.Hem	Y	Y	Y	Archer et al 2013

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91319	KC572853	S.Hem	Y	Y	Y	Archer et al 2013
91321	KC572854	S.Hem	Y	Y	Y	Archer et al 2013
91298	KC582235	S.Hem	Y	N	N	this study
91307	KC582236	S.Hem	Y	N	N	this study
91309	KC582237	S.Hem	Y	N	N	this study
91314	KC582238	S.Hem	Y	N	N	this study
91320	KC582239	S.Hem	Y	N	N	this study
South Georgia Island		S.Hem	Y	N	N	Sremba et al 2015

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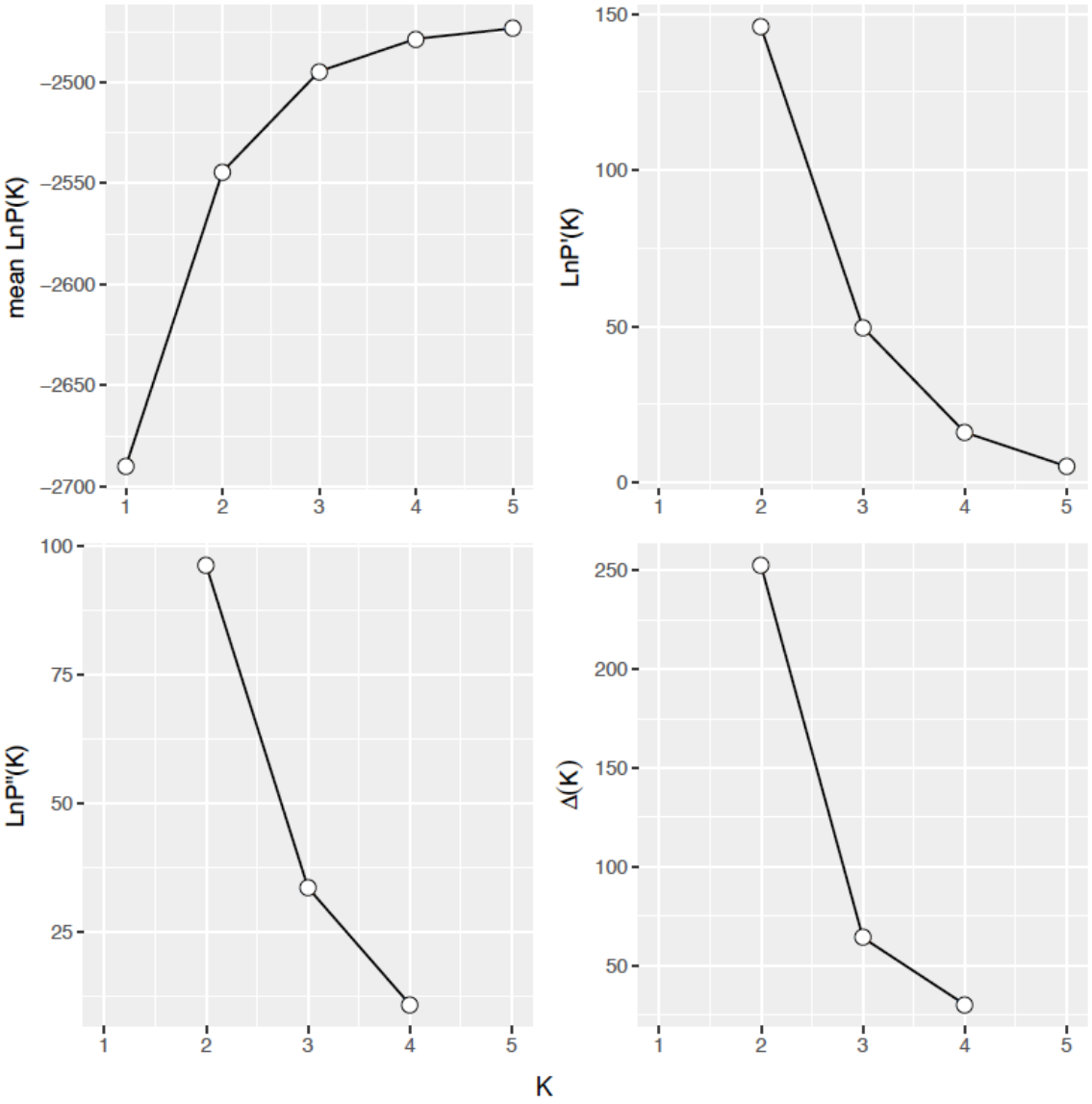
Supplementary Data SD4. – Evanno plots for STRUCTURE results with 23 SNPs.



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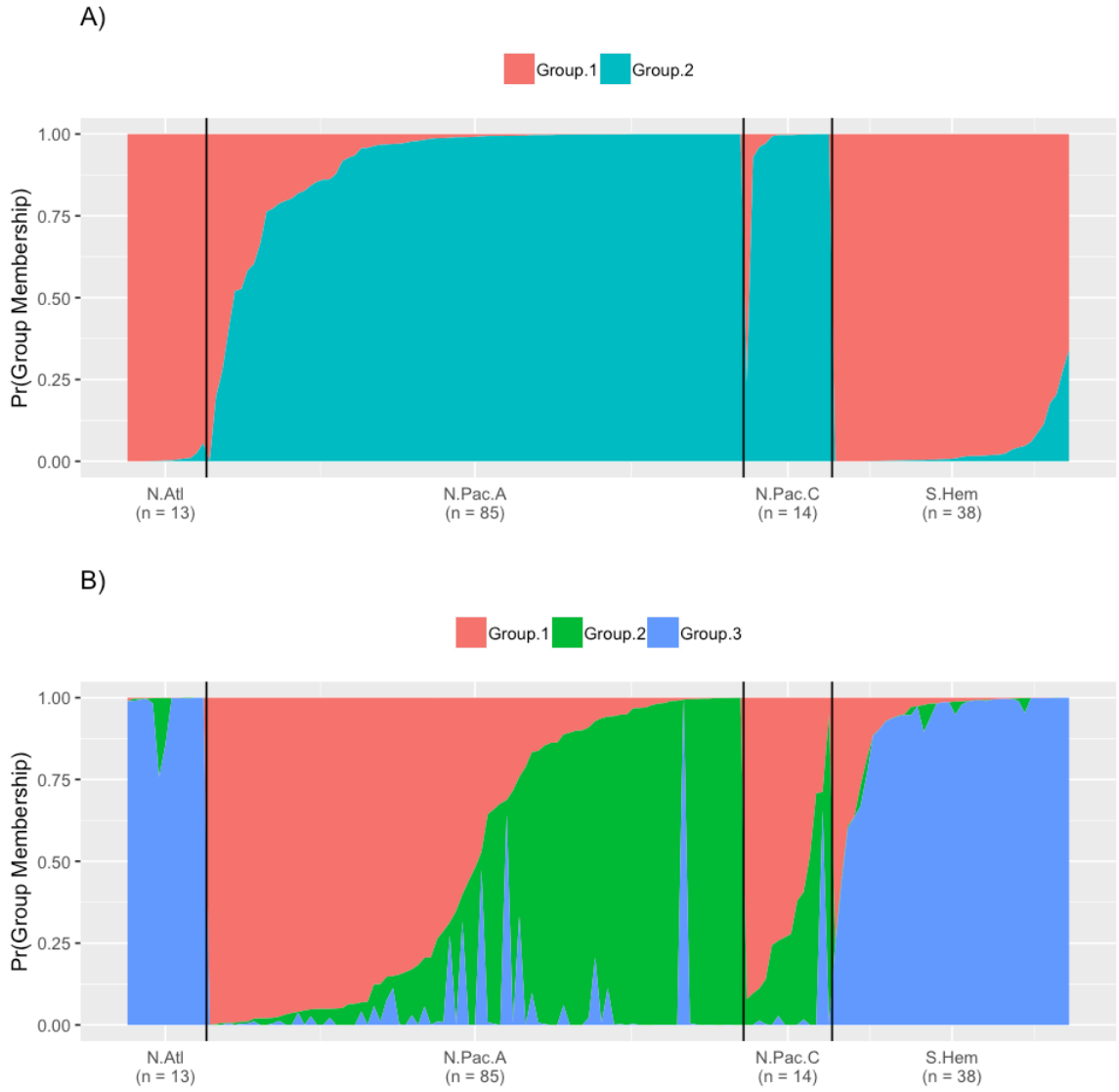
Supplementary Data SD5. – Distribution of group membership probabilities (y-axis) for individuals in each strata (x-axis) from STRUCTURE analyses for A) K=2, and B) K=3.



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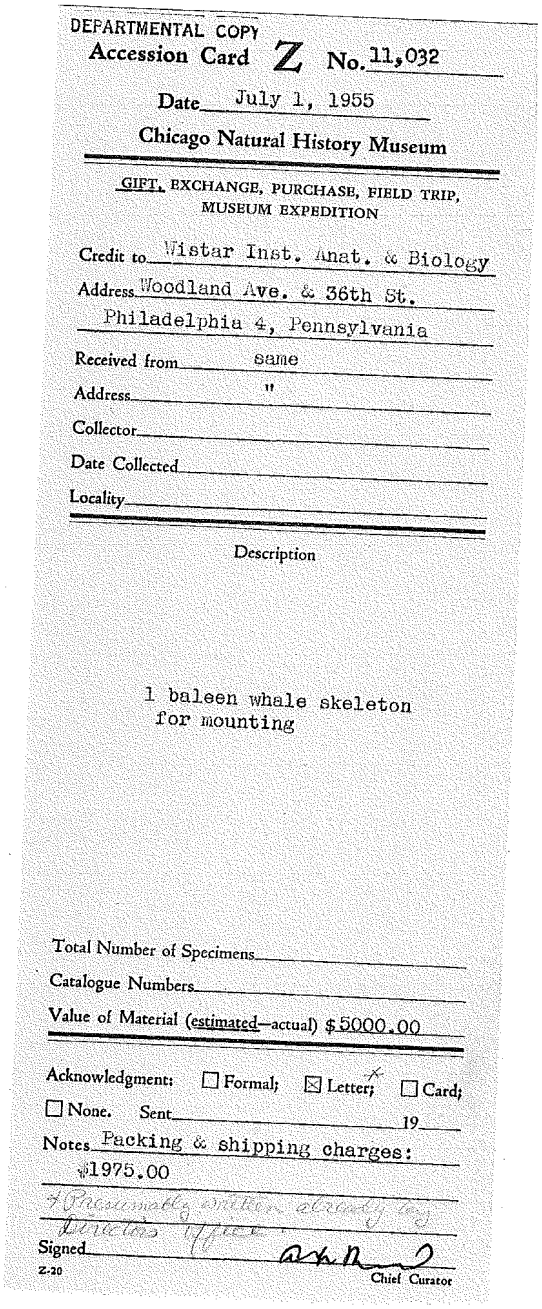
Supplementary Data SD6. – Shipping receipt indicating delivery of specimen labelled *Balaenoptera velifera* from the Wistar Institute to the Chicago Field Museum.



DEPARTMENTAL COPY

Accession Card Z No. 11,032

Date July 1, 1955

Chicago Natural History Museum

GIFT, EXCHANGE, PURCHASE, FIELD TRIP, MUSEUM EXPEDITION

Credit to Wistar Inst. Anat. & Biology

Address Woodland Ave. & 36th St.
Philadelphia 4, Pennsylvania

Received from same

Address "

Collector

Date Collected

Locality

Description

1 baleen whale skeleton
for mounting

Total Number of Specimens

Catalogue Numbers

Value of Material (estimated—actual) $5000.00

Acknowledgment: ☐ Formal; ☒ Letter; ☐ Card;
☐ None. Sent 19

Notes Packing & shipping charges:
$1975.00
* Presumably written already by Director's Office

Signed

Z-20 Chief Curator

Supplementary Data SD7. – Description and measurements of neotype of *Balaenoptera physalus velifera*, Cope 1869

Museum: Natural History Museum of Los Angeles County (LACM)

Catalog Number: 54761

Collection Date: 20 May 1897

Collection Location: "Foot of Alamitos Avenue" Long Beach, California, USA

Description: The skull has been longitudinally bisected into left and right halves. The right maxilla is largely intact but separated from the right braincase. The right premaxilla is separated from the maxilla. Only the central third of the left maxilla is present and the left premaxilla is in two halves. The distal half of the vomer is broken from the skull. Both mandibles, many vertebrae and some ribs are present.

Skull Measurement (centimeters)	Left	Right
Width of skull (minimum) across orbital centers	96	102
Width of skull (maximum) across preorbital process of frontal	102	105
Width of skull (maximum) across postorbital process of frontal	104	106
Width of skull (maximum) across zygomatic process of squamosal	104	110
Least breadth of skull across posterior margins of temporal fossa	51	56
Width of skull (maximum) across exocciptals	67	75
Width of rostrum in apices of antorbital notches	N/A	223
Length (maximum) of temporal fossa	130	130
Width of temporal fossa	64	66
Height of temporal canal	63	61
Breadth of temporal canal	27	26
Length of orbit (frontals)	26	26

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Width (maximum) of occipital condyles	9	26
Diameter (maximum) of occipital condyle	25	
Diameter (minimum) of occipital condyle	16	
Depth (external) of skull	104	
Depth (external) of braincase	66	
Diameter (maximum) of bulla	7	7
Length of squamosal	44	44

Mandibular Measurement	Left	Right
Length of mandible	447	445
Length from poster external symphysis to condyle	430	433
Greatest length of symphysis	17	17
Depth of mandible at coronoid process	52	54
Depth of mandible at midlength	29	30
Depth of condyle	35	33
Width of condyle	34	33
Diameter (maximum) of mandibular foramen	15	14
Depth of coronoid process	37	38

Vertebrae	Height	Width	Depth	Total Height	Total Width
C2	19	31	6	32	N/A
C7	10	30	10	38	85
T3	20	31	16	53	78
L1	26	33	26	93	N/A
Ca1	26	35	28	N/A	65

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Supplementary Data SD8. – Images of LACM 54761. Scale bars in photos measure 55cm.

A) Right lateral view of skull, maxillae, and premaxillae

B) Posterior view of skull

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C) Dorsal view of mandibles

D) Anterior view of mandibles

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E) Closeup of right tympanic bulla

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