

Table S1. Log-likelihood assignment scores for *Fucus serratus* using all sites and following Rannala and Mountain (1)

Pictou (Nova Scotia)			Inverness (Nova Scotia)			Caplin Cove (Nova Scotia)		
Coming from	Likelihood score	Assignment probability	Coming from	Likelihood score	Assignment probability	Coming from	Likelihood score	Assignment probability
Galway (Ireland)	123.578	100.00	Greenock (Scotland)	137.683	100.00	Greenock	126.469	100.00
Jersey (Channel Islands)	155.36	0.0	Bangor	158.188	0.0	Oban	145.879	0.0
Pl. du Lividie (France)	163.998		Oban	173.527		Bangor	147.702	
I'lle de Siec (France)	172.846		Jersey	180.966		Plymouth	159.573	
Bangor (Northern Ireland)	172.946		Fort William	193.135		Fort William	169.37	
Oban (Scotland)	174.277		Plymouth	205.971		Jersey (E)	170.866	
Greenock (Scotland)	174.949		I'lle de Siec	208.292		Pl. du Lividie	185.795	
Roscoff (France)	178.2		Galway	211.901		Galway	198.66	
Plymouth (Wales)	183.446		Pl. du Lividie	214.133		Cromarty	199.815	
Limerick (Ireland)	194.612		Roscoff	216.325		I'lle de Siec	206.871	
Fort William (Scotland)	200.862		Cromarty	222.678		Sligo	211.783	
Cromarty (Scotland)	202.434		Rousay	226.023		Rousay	212.572	
Rousay, Orkney (Scotland)	213.705		Sligo	252.498		Roscoff	214.671	
Peterhead (Scotland)	240.032		Peterhead	277.596		Wexford	236.639	
Sligo (Ireland)	241.206		Ålesund	280.488		Peterhead	239.599	

Trondheim (Norway)	241.323	St Valerie en Caux	282.178	Bodø (N)	244.357
Ålesund (Norway)	249.25	Wexford	287.148	St Valerie en Caux	246.362
Bodø (Norway)	262.96	Trondheim	293.264	Ålesund	253.303
Giant's Causeway (Northern Ireland)	265.497	Reykjavik	312.605	Trondheim	269.463
Gjerrild Klint (Denmark)	266.047	Smaskjaer	313.803	Giant's Causeway	272.907
Smaskjaer (Norway)	271.318	Bodø	314.724	Gjerrild Klint	274.579
Wexford (Ireland)	276.735	Gjerrild Klint	317.113	Limerick	281.464
Bergen (Norway)	278.915	Limerick	318.127	Smaskjaer	286.401
Reykjavik (Iceland)	282.993	Giant's Causeway	327.249	Reykjavik	290.016
Karlshamn (Sweden)	287.91	Nyborg	345.765	Nyborg	300.289
St Valerie en Caux (France)	297.278	Suduroy	346.917	Karlshamn	301.978
Suduroy (Faroes)	304.694	Karlshamn	361.891	Suduroy	305.02
Nyborg (Norway)	319.854	Bergen	362.995	Bergen	318.651

1. Rannala B, Mountain JL (1997) Detecting immigration by using multilocus genotypes. *Proc Natl Acad Sci USA* 94: 9197--9201