

A. Overall model matrices:

Mytilus californianus

Spring ($\lambda = 0.8402$)

0.0074	12.15	24.49	0	5.15	10.37
0.0215	0.1660	0	0	0	0
0	0.1489	0.1861	0	0	0
0	13.99	28.20	0.0000	3.74	7.54
0	0	0	0.0263	0.1463	0
0	0	0	0	0.1281	0.1300

Fall ($\lambda = 1.0022$)

0.0030	8.23	16.58	0	26.23	52.85
0.0244	0.2443	0	0	0	0
0	0.0467	0.2565	0	0	0
0	10.65	21.46	0.0115	26.98	54.36
0	0	0	0.0144	0.1438	0
0	0	0	0	0.1257	0.4069

Annual: Spring x Fall ($\lambda = 1.0792$)

0.2965	4.1728	6.4044	0.0742	2.2382	4.6106
0.0041	0.2175	0.3565	0	0.5639	1.1363
0.0036	0.0451	0.0477	0	0	0
0.3414	4.7347	7.2333	0.0539	1.4856	3.068
0	0.2801	0.5644	0.0024	0.7306	1.4297
0	0	0	0.0018	0.0348	0.0529

Mytilus galloprovincialis

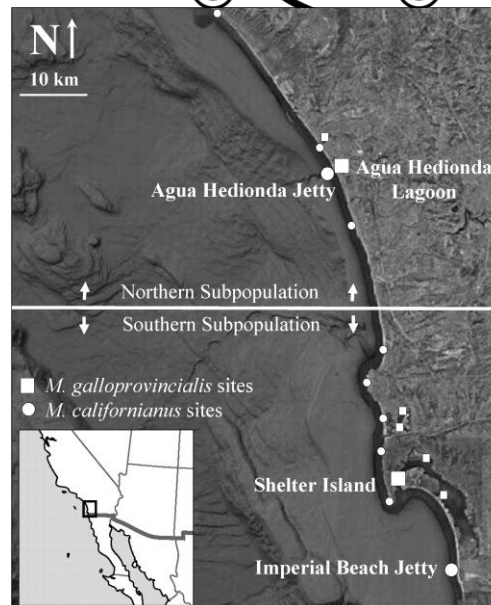
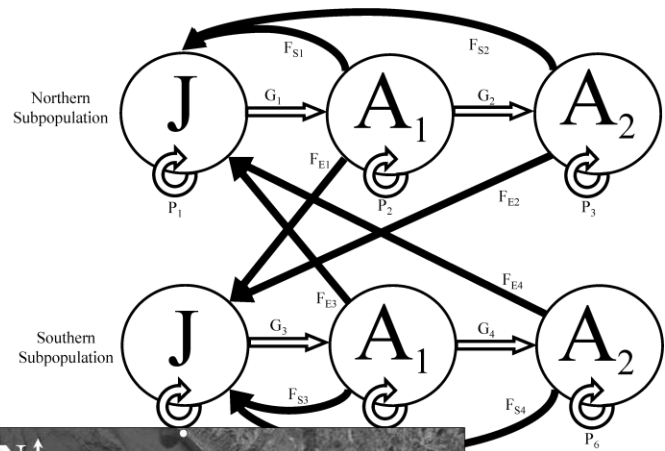
Spring ($\lambda = 1.1748$)

0.0047	29.10	58.63	0	4.44	8.95
0.0234	0.0315	0	0	0	0
0	0.2694	0.2860	0	0	0
0	31.23	62.93	0.0151	8.52	17.18
0	0	0	0.0227	0.1303	0
0	0	0	0	0.3150	0.3464

Fall ($\lambda = 0.6444$)

0.0047	2.78	5.60	0	2.50	5.03
0.0234	0.1870	0	0	0	0
0	0.1139	0.2860	0	0	0
0	3.57	7.18	0.0145	2.04	4.11
0	0	0	0.0218	0.2791	0
0	0	0	0	0.1464	0.4731

Northern Subpopulation			South-to-North Export		
P_1	F_{S1}	F_{S2}	0	F_{E3}	F_{E4}
G_1	P_2	0	0	0	0
0	G_2	P_3	0	0	0
North-to-South Export			Southern Subpopulation		
0	F_{E1}	F_{E2}	P_4	F_{S3}	F_{S4}
0	0	0	G_3	P_5	0
0	0	0	0	G_4	P_6



Annual: Spring x Fall ($\lambda = 1.0243$)

0.0651	1.733	1.8772	0.0568	1.9311	1.7845
0.0045	0.6868	1.3719	0	0.1039	0.2094
0.0027	0.0806	0.0818	0	0	0
0.0835	2.4996	2.966	0.0465	1.684	1.6728
0	0.6808	1.3719	0.0067	0.2221	0.3745
0	0	0	0.0033	0.1681	0.1639

B Elasticity matrices: Elasticity values for each matrix element in the overall model.

Mytilus californianus

Spring

0.1%	2.5%	0.7%	0	0.7%	0.8%
19.8%	1.7%	0	0	0	0
0	2.7%	0.5%	0	0	0
0	2.1%	0.6%	0.0%	0.4%	0.4%
0	0	0	59.0%	2.2%	0
0	0	0	0	3.8%	2.1%

Fall

0.0%	3.6%	0.6%	0	14.4%	1.4%
4.7%	4.3%	0	0	0	0
0	1.2%	0.5%	0	0	0
0	12.5%	2.1%	0.2%	40.3%	4.0%
0	0	0	3.3%	3.8%	0
0	0	0	0	2.8%	0.5%

Mytilus galloprovincialis

Spring

0.0%	40.7%	8.2%	0	7.4%	3.2%
3.2%	0.8%	0	0	0	0
0	9.8%	1.0%	0	0	0
0	9.8%	2.0%	0.0%	3.2%	1.4%
0	0	0	1.2%	1.4%	0
0	0	0	0	5.4%	1.3%

Fall

0.1%	0.3%	1.0%	0	0.4%	1.4%
59.4%	1.7%	0	0	0	0
0	1.9%	9.3%	0	0	0
0	0.1%	0.5%	0.2%	0.1%	0.4%
0	0	0	16.3%	1.1%	0
0	0	0	0	0.9%	4.9%

THESE DATA APPEAR AS ONLINE APPENDICES IN

Carson, H.S., G. Cook, M. Paola López-Duarte and Lisa A. Levin.
Evaluating the importance of demographic connectivity in a marine metapopulation
Ecology 92: 1972-84. This paper provides the demographic methods.