

SI Table 1. Comparison of all 34 linear mixed effects models predicting the influence of reserve characteristics (total protected area, latitude, fishing pressure, MPA age, and select interactions) on fish biomass response ratios across 12 MPAs in a temperate marine reserve network.

<b>Model</b>	<b>Log df likelihood</b>	<b>AICc</b>	<b>ΔAICc</b>
<b>Total Protected Area + MPA age + (1 Site)</b>	5 -19.10	49.11	0.00
<b>Total Protected Area + Latitude + MPA age + (1 Site)</b>	6 -18.12	49.54	0.43
<b>Total Protected Area + MPA age + Fishing pressure + (1 Site)</b>	6 -18.89	51.06	1.95
Total Protected Area + Latitude + MPA age + MPA age*Latitude + (1 Site)	7 -18.11	51.97	2.86
Total Protected Area + Latitude + MPA age + Fishing Pressure + (1 Site)	7 -18.12	52.00	2.88
Total Protected Area + Latitude + MPA age + Fishing Pressure + Fishing pressure*Latitude + (1 Site)	8 -17.58	53.44	4.32
Total Protected Area +MPA age + Fishing Pressure + Total Protected Area*Fishing pressure + (1 Site)	7 -18.85	53.46	4.35
Total Protected Area + Latitude + MPA age + Fishing Pressure + Total Protected Area*Fishing pressure + (1 Site)	8 -17.81	53.91	4.80
Total Protected Area + Latitude + MPA age + Fishing Pressure + MPA age*Latitude + (1 Site)	8 -18.11	54.50	5.39

Total Protected Area + Latitude + MPA age + Fishing Pressure + Total Protected Area*Fishing pressure + Fishing pressure*Latitude + (1 Site)	9	-16.97	54.84	5.72
Latitude + MPA age + (1 Site)	5	-22.28	55.48	6.36
MPA age + (1 Site)	4	-23.45	55.50	6.38
Total Protected Area + Latitude + MPA age + Fishing Pressure + Total Protected Area*Fishing pressure + Fishing pressure*Latitude + (1 Site)	9	-17.58	56.05	6.94
Total Protected Area + Latitude + (1 Site)	5	-22.76	56.44	7.32
Total Protected Area + Latitude + MPA age + Fishing Pressure + Latitude*MPA age + Total Protected Area*Latitude + (1 Site)	9	-17.78	56.46	7.34
MPA age + Fishing pressure (1 Site)	5	-22.94	56.79	7.68
Total Protected Area + (1 Site)	4	-24.39	57.38	8.26
Total Protected Area + Latitude + MPA age + Fishing Pressure + Total Protected Area*Fishing pressure + Latitude*MPA age + Fishing pressure*Latitude + (1 Site)	10	-16.96	57.53	8.42
Total Protected Area + Fishing pressure + (1 Site)	5	-23.41	57.73	8.62
MPA age + Fishing pressure + Latitude + (1 Site)	6	-22.24	57.78	8.66
MPA age + Latitude + MPA age*Latitude + (1 Site)	6	-22.28	57.84	8.73
Total Protected Area + Fishing pressure + Latitude + (1 Site)	6	-22.56	58.42	9.30
Total Protected Area + Fishing pressure + Total Protected Area*Fishing pressure + (1 Site)	6	-23.22	59.73	10.62

MPA age + Fishing pressure + Latitude + Fishing pressure*Latitude + (1 Site)	7	-22.16	60.06 10.95
Total Protected Area + Fishing pressure + Latitude + Fishing pressure*Latitude + (1 Site)	7	-22.16	60.07 10.95
MPA age + Fishing pressure + Latitude + Fishing pressure*Latitude + MPA age*Latitude + (1 Site)	7	-22.23	60.20 11.09
Latitude + (1 Site)	4	-25.97	60.53 11.42
Total Protected Area + Fishing pressure + Latitude + Total Protected Area*Fishing pressure + (1 Site)	7	-22.51	60.78 11.66
Fishing pressure + (1 Site)	4	-26.51	61.62 12.51
(1 Site)	3	-27.67	61.70 12.58
Fishing pressure + Latitude + (1 Site)	5	-25.70	62.31 13.20
Total Protected Area + Fishing pressure + Latitude + Total Protected Area*Fishing pressure + Fishing pressure*Latitude (1 Site)	8	-22.02	62.32 13.21
MPA age + Fishing pressure + Latitude + MPA age*Latitude + Fishing pressure*Latitude +(1 Site)	8	-22.15	62.58 13.47
Fishing pressure + Latitude + Fishing pressure*Latitude + (1 Site)	6	-25.64	64.57 15.46