

Effects of a nonnative habitat-forming species on mobile and sessile epifaunal communities

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Marine Ecology Progress Series 398: 69–80 (2010)

In the following tables, we present the results of the ANOVA for both experiments (Table S1) and provide complete lists of taxa observed in each treatment for the mobile epifauna experiment (Table S2) and the sessile epifauna experiment (Table S3)

Table S1. ANOVA for both mobile and sessile experiments

Variable	Source	df	F	p
Mobile experiment				
Surface area	Model	12	6.00	0.0002
	Block	9	0.80	0.6218
	Treatment	3	20.29	<0.0001
Abundance	Model	14	1.41	0.2001
	Block	9	0.69	0.7149
	Treatment	5	2.64	0.0395
Richness	Model	14	6.61	<0.0001
	Block	9	0.63	0.7662
	Treatment	5	16.26	<0.0001
Diversity	Model	14	5.75	<0.0001
	Block	9	0.68	0.7247
	Treatment	5	14.47	<0.0001
Sessile experiment				
Surface area	Model	14	21.43	<0.0001
	Block	9	1.49	0.1817
	Treatment	5	57.10	<0.0001
Abundance	Model	16	19.98	<0.0001
	Block	9	3.43	0.0019
	Treatment	7	40.86	<0.0001
Richness	Model	16	2.02	0.0263
	Block	9	0.75	0.6594
	Treatment	7	3.72	0.0021
Diversity	Model	16	3.24	0.0005
	Block	9	1.80	0.0880
	Treatment	7	5.05	0.0002

Table S2. Qualitative description of species collected in each treatment. Some specimens could only be identified to family or genus, and some genera contained multiple species that could not be readily distinguished from one another. Letters to the right of the species name indicate native/nonnative status (N: native, I: introduced, U: unknown). Trophic groups are P: predator, H: herbivore, D: detritivore, F: filter feeder. Letters in last 6 columns indicate relative abundance across treatments. R: rare (mean <5 replicate⁻¹), C: common (mean 5–50 replicate⁻¹), A: abundant (mean 50–199 replicate⁻¹), VA: very abundant (mean >200 replicate⁻¹), (–) no individuals of the species were found, (?): feeding habits for a taxon are unknown

Taxon	Species and status	Trophic group	Small tile	Large tile	Ascidia	Mytilus	Watersipora mimic	Watersipora
Amphipoda	<i>Caprella mutica</i> I	F/D	C	VA	C	A	C	C
	<i>Caprella californica</i> N	F/D	C	C	R	R	C	C
	<i>Mayerella banksia</i> N	P/D	R	C	C	C	C	R
	<i>Ampithoe</i> spp. U	H	C	VA	A	A	A	A
	<i>Corophium</i> spp. N	D	C	A	A	A	A	C
	<i>Leucothoides pacifica</i> N	F	R	R	R	R	R	R

Table S2 (continued)

Taxon	Species and status	Trophic group	Small tile	Large tile	Ascidia	Mytilus	Watersipora mimic	Watersipora
Isopoda	<i>Idotea</i> sp. 1 N	D	C	C	C	C	C	C
	<i>Idotea</i> sp. 2 N	D	-	R	-	R	-	R
	<i>Sphaeroma quoyanum</i> I	F	R	R	R	R	R	R
Copepoda	Cyclopoid copepod U	H	R	C	C	C	C	C
Ostracoda	Ostracoda sp. U	H/D	-	-	R	-	-	-
Decapoda	<i>Taneis</i> sp. N	D	R	C	C	C	C	C
	<i>Leptochelia dubia</i> N	D	R	R	R	R	R	R
	<i>Pachygrapsus</i> sp. N	D	-	-	-	-	R	-
	<i>Heptacarpus</i> sp. N	P	-	R	-	R	R	R
Polychaeta	<i>Palaemon macrodactylus</i> I	P	-	-	-	R	-	-
	<i>Crangon stylirostris</i> N	P	-	-	-	-	R	R
	Ampharetidae sp. N	D	-	R	R	-	R	R
	<i>Aphrodita</i> sp. N	P/D	-	-	-	-	R	R
	<i>Arenicola</i> sp. N	D	-	R	R	R	R	R
	<i>Capitella capitata</i> I	P/D	-	-	R	-	-	R
	<i>Cirraformia luxuriosa</i> N	D	-	-	-	-	-	R
	<i>Tharyx parvus</i> N	D	-	R	R	R	R	R
	<i>Protodorvillea gracilis</i> N	P	R	-	-	R	R	R
	<i>Dorvillea longicornis</i> N	P	R	C	C	C	A	A
	<i>Ophryotrocha puerilis</i> N	P/D	R	R	R	R	C	C
	<i>Glycinde armigera</i> N	P	R	R	R	R	R	R
	<i>Glycinde polygnatha</i> N	P	-	-	-	-	-	R
	<i>Hemipodia simplex</i> N	P	-	R	R	R	R	R
	<i>Lumbrineris</i> sp. 1 N	P	R	R	R	R	C	C
	<i>Lumbrineris</i> sp. 2 N	P	-	-	R	R	R	R
	<i>Lumbrineris</i> sp. 3 N	P	-	R	R	-	R	R
	Nephtyidae N	P	-	-	-	-	-	R
	<i>Nereis latescens</i> N	P	C	A	A	A	A	A
	Onuphidae N	?	-	-	R	-	R	R
	<i>Ophelia</i> sp. N	D	R	C	C	C	C	C
	<i>Eteone pacifica</i> N	P	-	-	-	-	R	R
	<i>Sige bifoliata</i> N	P	R	R	R	R	R	R
	<i>Eulalia californiensis</i> N	P	-	-	-	R	R	R
	<i>Eulalia quadrioculata</i> N	P	-	-	-	-	R	R
	<i>Genetyllis castanea</i> N	P	-	R	-	R	-	R
	<i>Eumida sanguinea</i> N	P	-	R	-	-	-	-
	<i>Harmothoe imbricata</i> U	P	R	R	R	R	R	C
	<i>Halosydna brevisetosa</i> N	P	R	R	-	R	R	R
	Sabellidae sp. N	F	-	R	R	R	-	R
	<i>Sternaspis fossor</i> N	F	-	R	-	-	-	-
	<i>Typosyllis aciculata</i> N	P	R	R	R	R	R	C
	<i>Odontosyllis parva</i> N	P	R	R	R	R	R	R
Terebellidae sp. N	D/P	-	-	-	R	R	R	
<i>Neoleprea californica</i> N	D/P	R	R	R	C	C	C	
Polychaeta sp.1 U	?	-	R	-	-	-	R	
Polychaeta sp. 2 U	?	-	R	-	-	-	R	
Polychaeta sp. 3 U	?	-	-	-	R	-	R	
Platyhelminthes	<i>Pseudoceros</i> sp. N	P	-	R	R	R	R	R
	Unknown red flatworm U	P	-	-	R	-	-	-
Oligochaeta	Oligochaeta sp. U	?	-	R	R	-	R	
Sipuncula	Sipuncula sp.1 U	D	-	R	R	R	R	
Mollusca	<i>Mopalia muscosa</i> N	D	-	R	-	-	-	R
	<i>Sinezona rimuloides</i> N	H	-	-	-	-	R	R
	<i>Macoma</i> sp. 1 N	F	R	R	R	R	R	R
	<i>Macoma</i> sp. 2 N	F	R	R	R	R	R	C
	<i>Macoma</i> sp. 3 N	F	-	-	-	-	R	R
	<i>Homalopoma baculum</i> N	H	-	R	-	-	-	-
	<i>Hinnites giganteus</i> N	F	R	-	-	-	-	-
	<i>Solen sicarius</i> N	H/F	-	R	R	R	R	R
	<i>Williamia peltoides</i> N	H/F	-	R	-	R	R	R

Table S2 (continued)

Taxon	Species and status	Trophic group	Small tile	Large tile	<i>Ascidia</i>	<i>Mytilus</i>	<i>Watersipora</i> mimic	<i>Watersipora</i>
	<i>Amphissa versicolor</i> N	P	–	–	–	R	–	–
	<i>Modiolus capax</i> N	F	–	–	–	–	R	–
	<i>Lottia pelta</i> N	D	–	–	–	–	–	R
	<i>Onchidella borealis</i> N	D	–	–	–	–	–	R
	<i>Polycera atra</i> N	P	–	–	–	–	–	R
	<i>Dendronotus frondosus</i> N	P	–	–	–	R	–	–
	<i>Adula</i> sp. N	F	–	–	–	R	–	–
	<i>Gibbonsia metzi</i> N	P	–	–	–	R	R	R
Teleostei	<i>Syngnathus leptorhynchus</i> N	P	–	–	–	R	–	–
	<i>Leptocottus armatus</i> N	P	–	–	–	–	R	–
Cumulative species richness			27	45	39	47	51	61

Table S3. Qualitative list of sessile species observed on treatments. Letters to the right of the species name indicate native/nonnative status (N: native, I: introduced, U: unknown). Letters in columns indicate the relative abundance of the species (R: rare, present in fewer than half of the replicates; C: common, present in half or more of the replicates)

Taxon	Species and status	Small tile	Large tile	<i>Ascidia</i>	<i>Ascidia</i> mimic	<i>Mytilus</i>	<i>Mytilus</i> mimic	<i>Watersipora</i>	<i>Watersipora</i> mimic
Urochordata	<i>Ascidia ceratodes</i> N	C	C	C	C	C	C	C	C
	<i>Botrylloides diegensis</i> N	–	R	R	R	–	R	–	R
	<i>Botrylloides violaceus</i> I	C	C	C	C	C	C	C	C
	<i>Botryllus schlosseri</i> I	C	C	R	R	C	C	R	C
	<i>Ciona intestinalis</i> I	C	C	C	C	C	C	C	C
	<i>Ciona savignii</i> I	R	R	R	–	–	R	R	–
	<i>Didemnum lahillei</i> I	R	R	C	R	R	R	R	–
	<i>Diplosoma listerianum</i> I	C	C	C	C	C	C	C	C
	<i>Distaplia occidentalis</i> N	C	C	C	C	C	C	C	C
	<i>Eudistoma ritteri</i> N	–	R	–	–	–	–	–	–
Bryozoa	<i>Bowerbankia gracilis</i> I	R	C	C	C	C	C	C	C
	<i>Bugula californica</i> N	R	R	C	R	–	R	R	R
	<i>Bugula neritina</i> I	C	C	C	C	C	C	C	C
	<i>Schizoporella unicornis</i> I	–	C	–	R	R	R	R	–
	<i>Watersipora subtorquata</i> I	C	C	C	C	C	C	C	C
Porifera	<i>Halichondria</i> sp. U	R	R	R	R	R	–	R	R
	Grey tube sponge U	–	–	–	–	R	R	–	–
	Yellow mat sponge U	–	–	–	–	–	–	–	–
Cnidaria	<i>Obelia</i> sp. U	C	C	C	C	C	C	C	C
	<i>Metridium senile</i> N	R	R	R	–	–	R	R	–
Cumulative species richness		15	18	16	15	14	17	16	13