

Table S1. Mean cumulative abundance of live organisms separated by species or taxa sampled from replicate quarts separated by vector stage (Maine field source or Maryland post-shipment distributor baitbox) and season (spring, summer, or fall). Plantae and algae species or taxa are recorded as present (Y) or absent (N). All other taxa were quantified by number of individuals and are denoted as not present (0), <1 individual (-), 1-10 individuals (+), or >10 individuals (++). Bolded species indicate those that are known successful invaders. The functional group for each species or taxa is composed of the five ecological traits considered the most relevant to competition in benthic communities (for abbreviations see Fowler et al. 2016).

Taxa	Functional Group	Spring		Summer		Fall	
		Field	Baitbox	Field	Baitbox	Field	Baitbox
Macroalgae							
<i>Ascophyllum nodosum</i> ecad							
<i>scorpioides</i>	XBASA	Y	Y	Y	Y	Y	Y
<i>Ascophyllum nodosum</i>	XBASA	Y	Y	Y	Y	Y	Y
<i>Elachista fucicola</i>	XBASA	N	N	N	N	Y	Y
<i>Fucus distichus</i>	XBASA	N	Y	N	N	N	Y
<i>Fucus spiralis</i>	XBASA	Y	Y	Y	Y	Y	Y
<i>Fucus</i> spp.	XBASA	Y	Y	Y	Y	Y	Y
<i>Fucus vesiculosus</i>	XBASA	N	Y	Y	Y	N	Y
<i>Vertebrata lanosa</i>	LBASA	N	Y	N	N	Y	N
<i>Ulva</i> sp.	XBASA	Y	Y	Y	Y	Y	Y
Plantae							
<i>Spartina alterniflora</i>	XBASA	Y	Y	Y	Y	Y	Y
<i>Zostera marina</i>	XBASA	Y	Y	Y	Y	N	Y
Crustacea: Amphipoda							
<i>Americorchestia megalophthalma</i>	MMGSC	0	0	0	-	0	0
<i>Ampithoe valida</i>	MMGSC	0	0	0	-	0	0
<i>Corophium</i> sp.	MMGSC	+	0	-	0	-	-
<i>Gammarus duebeni</i>	MMGSC	0	0	+	0	+	-

<i>Gammarus finmarchicus</i>	MMGSC	+	-	0	0	0	0
<i>Gammarus lawrencianus</i>	MMGSC	+	0	0	0	0	0
<i>Gammarus mucronatus</i>	MMGSC	-	0	+	0	-	-
<i>Echinogammarus obtusatus</i>	MMGSC	-	-	0	0	0	0
<i>Gammarus oceanicus</i>	MMGSC	+	-	-	+	+	-
<i>Gammarus setosus</i>	MMGSC	-	0	+	0	+	-
<i>Gammarus</i> sp.	MMGSC	0	-	-	-	-	-
<i>Gammarus tigrinus</i>	MMGSC	0	0	-	0	-	+
<i>Gammarus palustris</i>	MMGSC	0	0	-	0	0	0
<i>Apohyale prevostii</i>	MMGSC	+	+	+	++	++	++
<i>Orchestia grillus</i>	MMGSC	0	0	-	-	0	-
Crustacea: Isopoda							
<i>Cyathura polita</i>	MMGSC	0	0	0	0	-	-
<i>Edotia triloba</i>	MMGSC	0	-	0	0	0	0
<i>Jaera albifrons</i>	MMGSC	++	++	++	++	++	+
<i>Littorophiloscia vittata</i>	MMGSC	0	0	0	-	0	0
Crustacea: Cirripedia							
<i>Balanus crenatus</i>	LMSSA	0	0	-	0	0	0
Crustacea: Decapoda							
Tanaidacea	MMGSC	0	-	0	0	0	0
<i>Carcinus maenas</i>	LMPSC	+	0	-	0	+	0
Molluscs							
<i>Gemma gemma</i>	MMSSA	-	0	0	0	-	0
<i>Hybrobia</i> sp.	MMGSC	+	-	+	+	+	-
<i>Onoba aculeus</i>	MMGSC	-	0	0	0	0	0
<i>Lacuna vincta</i>	MMGSC	-	0	0	0	0	0

<i>Lasaea adansoni</i>	MMGSC	0	0	-	-	0	0
<i>Littorina littorea</i>	MMGSC	+	-	++	+	++	-
<i>Littorina obtusata</i>	MMGSC	-	+	++	+	+	+
<i>Littorina saxatilis</i>	MMGSC	++	+	++	+	++	+
<i>Littorina</i> sp.	MMGSC	0	0	-	-	0	0
<i>Melampus bidentatus</i>	MMGSC	0	-	0	0	0	0
<i>Mya arenaria</i>	LMSSB	-	-	-	+	+	-
<i>Mysella planulata</i>	LMSSB	0	-	-	-	0	-
<i>Mytilus</i> spp.	LMSSA	-	-	-	+	+	-
<i>Boonea bisuturalis</i>	MMGSC	0	-	0	-	0	-
<i>Skeneopsis planorbis</i>	SMSSC	-	-	-	-	+	0
Arachnida							
Bdellidae	SMGSC	0	-	-	-	0	-
Halacaridae	SMGSC	++	++	++	+	++	++
Oribatida	SMGSC	+	++	+	+	+	+
Bryozoa							
<i>Alcyonidium</i> sp.	LMSCA	-	0	0	-	0	0
<i>Flustrellidra hispida</i>	XMSCA	0	0	0	-	-	0
Ostracoda							
Ostracoda	SMSSC	++	-	+	-	++	-
Cnidaria							
<i>Astrangia poculata</i>	XBSCA	0	0	0	0	-	0
Sertulariidae	LBSCA	-	0	0	0	-	0
Polychaeta							
Capitellidae	MMDSB	++	+	+	+	++	-
Nemertea	MMDSB	++	-	-	-	+	0

Nephtyidae	MMDSB	0	0	0	0	-	0
Nereididae	MMDSB	-	-	-	-	-	0
Ophellidae	MMDSB	0	0	-	0	0	0
Sabellidae : <i>Fabricia</i> sp.	MMDSB	-	-	-	-	-	-
Spionidae	MMDSB	+	0	-	-	+	0
Spirorbidae	MMDSB	-	0	0	0	-	0
<hr/>							
Oligochaeta							
Oligochaeta	MMDSB	0	0	0	0	0	-
<hr/>							
Platyhelminthes							
Platyhelminthes	MMDSB	+	-	++	+	++	-
<hr/>							
Nematoda							
Nematoda	MMDSB	++	+	++	+	++	+
<hr/>							
Terrestrial							
<i>Anurida maritima</i>	Terrestrial	-	0	+	0	0	0
Aranea	Terrestrial	0	0	-	-	0	0
Ceratopogonidae larvae/pupae	Terrestrial	0	0	-	0	0	0
Chironomidae larvae	Terrestrial	0	0	+	0	0	0
Collembella	Terrestrial	0	0	-	0	0	0
Cyclorrhapha: Sphaeroceridae	Terrestrial	0	0	-	-	0	0
Hydrophilidae	Terrestrial	0	0	0	-	0	0
Hymenoptera: Cercopidae	Terrestrial	0	0	0	-	0	0
Hymenoptera: Formicidae	Terrestrial	0	0	0	-	0	0
Neuroptera	Terrestrial	0	0	0	-	0	0
Scathophagidae: <i>Scathophaga</i>	Terrestrial	0	0	+	0	0	0

Table S2. Jackknife second-order (Jack2) estimated and observed live marine macro-invertebrate taxonomic and functional group richness (sobs) across sampled individuals from Maine field source populations and those in Maryland post-shipment baitboxes calculated from rarefaction analyses and separated by season.

		Maine Field Source			Maryland Post-Shipment Baitboxes		
		Expected	Observed	Difference	Expected	Observed	Difference
Taxonomic	Spring	42.8	34	26%	34.7	23	51%
	Summer	56.6	38	49%	28.5	26	10%
	Fall	53.2	36	48%	34.7	23	51%
Functional	Spring	10.19	10	0.02%	6	6	0%
	Summer	11.99	10	20%	10.74	8	34.3%
	Fall	17.4	12	45%	15	8	87.5%

Table S3. SIMPER analysis from two-factor PERMANOVA where both vector stage (Maine field source and Maryland post-shipment distributor baitbox) and season (spring, summer, fall) operated as fixed factors for live marine invertebrates collected from replicate quarts. Average dissimilarity is shown between the field and distributor stages across all seasons and between seasons across both vector stages and those taxa or functional groupings contributing the most to the dissimilarity. Values are reported as percentages and whether their contribution to dissimilarity increased (+) or decreased (-) between the two stages or seasons.

Comparison	LIVE ABUNDANCE			LIVE FUNCTIONAL GROUP		
	Mean Dissimilarity	Taxa	Contribution (%)	Mean Dissimilarity	Group	Contribution (%)
Maine Field Source vs. Maryland Post-shipment Distributor Baitbox	72.38	<i>Jaera albifrons</i>	15.89 (-)	56.13	MMGSC	30.89 (-)
		Nematoda	12.92 (-)		MMDSB	14.86 (-)
		Halacaridae	9.96 (-)		XMSSA	12.78 (-)
		Ostracoda	5.99 (-)		LMGSC	12.08 (-)
		<i>Littorina saxatilis</i>	5.92 (-)		SMGSC	6.68 (-)
Spring vs. Summer	62.41	<i>Jaera albifrons</i>	16.84 (-)	55.34	MMGSC	27.21 (+)
		Halacaridae	10.73 (-)		SMGSC	20.42 (-)
		Nematoda	9.29 (-)		MMDSB	17.01 (-)
		<i>Littorina saxatilis</i>	7.54 (+)		LMGSC	12.47 (+)
		Capitellidae	5.14 (-)		SMSSC	9.54 (-)
Spring vs. Fall	54.62	<i>Jaera albifrons</i>	14.42 (-)	66.79	MMDSB	18.84 (-)
		Halacaridae	11.47 (-)		SMGSC	16.44 (-)
		Nematoda	10.05 (-)		MMGSC	15.95 (-)
		Capitellidae	6.19 (-)		XMSSA	15.50 (+)
		<i>Apohyale prevostii</i>	5.74 (+)		LMGSC	12.66 (+)
Summer vs. Fall	61.06	<i>Jaera albifrons</i>	14.35 (-)	51.78	MMGSC	24.59 (-)
		Halacaridae	9.37 (+)		XMSSA	21.52 (+)
		Nematoda	8.31 (+)		LMGSC	14.57 (+)
		<i>Littorina saxatilis</i>	8.19 (-)		MMDSB	12.83 (-)
		<i>Apohyale prevostii</i>	6.59 (+)		XESCA	5.42 (+)

Table S4. Average percent (\pm standard error - SE), maximum percent, and minimum percent dead marine macroinvertebrates found in replicate quarts during each season in Maine field source samples and Maryland post-shipment distributor baitboxes.

	Maine Field Source		Maryland Post-Shipment Baitboxes	
	Avg % \pm SE	Max % - Min %	Avg % \pm SE	Max % - Min %
Spring	1.58 \pm 0.31	3.96 - 0.17	34.90 \pm 7.39	82.8 – 4.61
Summer	14.8 \pm 6.21	84.19 - 0	37.31 \pm 5.25	63.70 – 7.27
Fall	1.06 \pm 0.51	7.72 - 0	30.45 \pm 5.92	64.24 - 6.98

Table S5. SIMPER analysis from two-factor PERMANOVA where both vector stage (Maine field source and Maryland post-shipment distributor baitbox) and season (spring, summer, fall) operated as fixed factors for dead marine invertebrates collected from replicate quarts. Average dissimilarity is shown between the field and distributor stages across all seasons and between seasons across both vector stages and those taxa or functional groupings contributing the most to the dissimilarity. Values are reported as percentages and whether their contribution to dissimilarity increased (+) or decreased (-) between the two stages or seasons

Comparison	DEAD ABUNDANCE			DEAD FUNCTIONAL GROUP		
	Mean Dissimilarity	Taxa	Contribution (%)	Mean Dissimilarity	Group	Contribution (%)
Maine Field Source vs. Maryland Post-shipment Distributor Baitbox	73.36	<i>Jaera albifrons</i>	28.95 (+)	54.33	MMGSC	56.46 (+)
		<i>Apohyale prevostii</i>	14.21 (+)		MMDSB	11.86 (-)
		Oribatidae	5.00 (+)		SMGSC	9.57 (+)
		Gammarid amphipod	4.76 (+)		LBSCA	7.73 (-)
		<i>Gammarus</i> sp.	4.41 (+)		LMSSA	6.76 (+)
Spring vs. Summer	68.88	<i>Jaera albifrons</i>	32.38 (+)	55.34	MMGSC	53.08 (+)
		Capitellidae	11.42 (+)		MMDSB	25.72 (+)
		<i>Apohyale prevostii</i>	8.04 (-)		SMGSC	7.87 (+)
		Gammarid amphipod	6.77 (+)		LBSCA	5.31 (-)
		Nematoda	5.66 (+)		LMSSA	4.33 (+)
Spring vs. Fall	69.40	<i>Jaera albifrons</i>	39.74 (-)	52.08	MMGSC	63.87 (-)
		<i>Apohyale prevostii</i>	10.10 (-)		LBSCA	14.25 (+)
		Sertulariidae	9.97 (+)		SMGSC	5.86 (-)
		<i>Gammarus finmarchicus</i>	4.93 (-)		LMSSB	4.55 (+)
		Gammarid amphipod	4.15 (+)		LMSSA	3.44 (-)
Summer vs. Fall	73.70	<i>Jaera albifrons</i>	31.09 (-)	59.32	MMGSC	54.73 (-)
		Capitellidae	9.69 (-)		MMDSB	20.25 (-)
		<i>Apohyale prevostii</i>	7.12 (-)		SMGSC	6.78 (-)
		Gammarid amphipod	7.05 (-)		LBSCA	5.70 (+)
		Nematoda	4.79 (-)		LMSSA	4.59 (-)

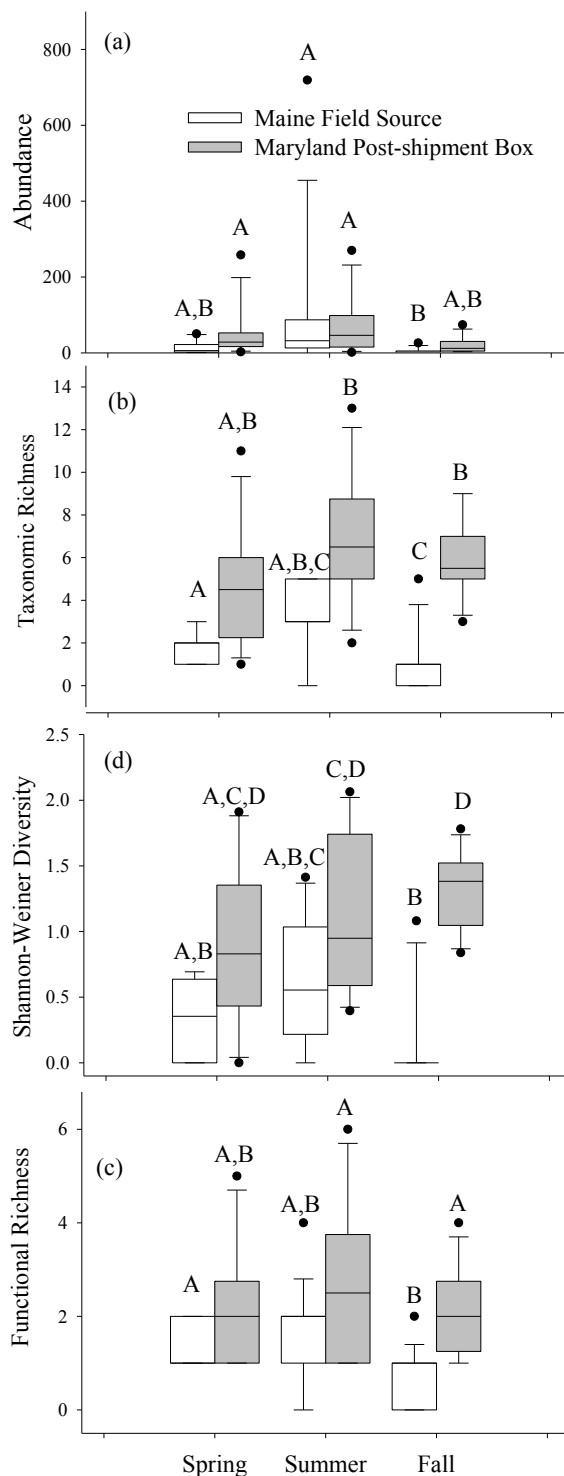


Figure S1. Mean abundance (\pm SE), taxonomic richness (\pm SE), functional group richness (\pm SE), and Shannon-Weiner diversity (\pm SE) of dead marine macroinvertebrates found in replicate quarts during each season in Maine field source samples and Maryland post-shipment distributor baitboxes. Note different y-axes. Bars that share letters indicate lack of statistical difference at $\alpha = 0.05$. The upper and lower limits of the box plots represent the 75th and 25th percentiles, and the horizontal bars at the ends of the lines outside the boxes represent the 90th and 10th percentiles. The horizontal line within the box plots is the median measure, and black circles represent measures that fell outside of the 90th and 10th percentile boundaries.

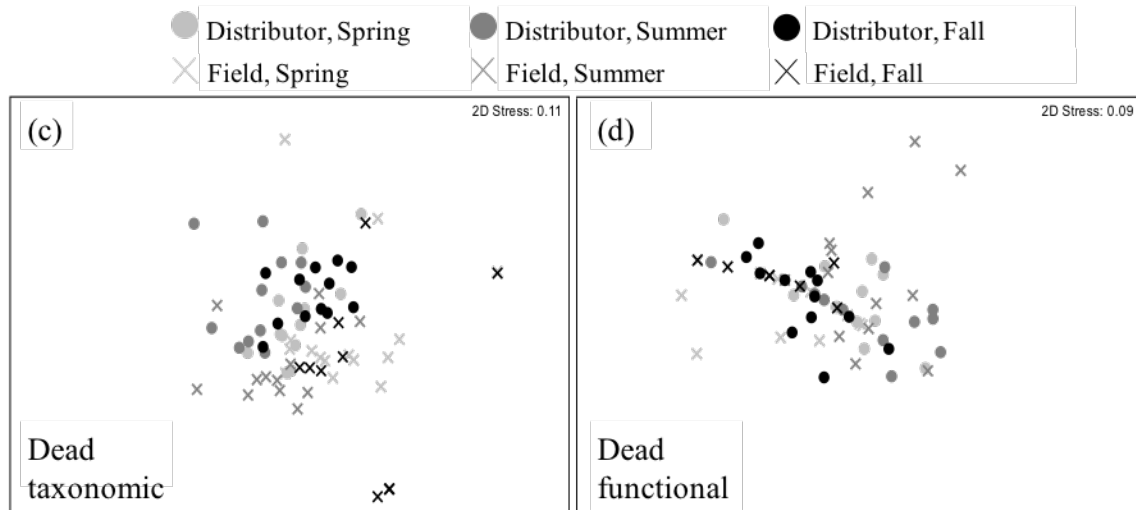


Figure S2. Non-metric multidimensional scaling plots displaying taxonomic and functional similarity of dead marine invertebrates sampled across seasons (spring = light grey, summer = dark grey, and fall = black) for Maine field source samples (cross mark) and Maine post-shipment distributor baitboxes (circles). PERMANOVA results for effect of vector x stage (C) Dead taxonomic $F_{2,75} = 1.57$, $P = 0.05$ and (D) Dead functional $F_{2,75} = 2.42$, $P = 0.018$.