

Supplementary Materials: Metal Bioaccumulation by Estuarine Food Webs in New England, USA

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Table S1. Biotic metal and metalloid concentrations. Element concentrations (ng·g⁻¹ dry wt.) for all sites and taxa, reported as mean (standard deviation). Standard deviations reported as 0 are less than 0.01.

Site	Taxa	As	Cd	Hg	MeHg	Pb	Se
Adams Pt. NH	Amphipod	2.91 (0.69)	0.04 (0.01)	0.08 (0.02)	0.08 (0.01)	0.81 (0.25)	1.39 (0.16)
Adams Pt. NH	Crab	5.61 (1.45)	0.28 (0.13)	0.12 (0.05)	0.08 (0.04)	4.24 (3.01)	1.79 (0.5)
Adams Pt. NH	Fundulus	2.92 (0.18)	0.03 (0.01)	0.16 (0.04)	0.14 (0.04)	0.55 (0.34)	1.93 (0.04)
Adams Pt. NH	Mussel	7.46 (0.72)	0.85 (0.46)	0.43 (0.15)	0.17 (0.04)	1.07 (0.28)	2.41 (0.43)
Adams Pt. NH	Shrimp	5.65 (1.02)	0.2 (0.06)	0.11 (0.02)	0.06 (0.02)	0.65 (0.41)	1.88 (0.22)
Bold Point, RI	Amphipod	10.56 (0.05)	0.1 (0.01)	0.02 (0)	0.02 (0)	1.62 (0.39)	1.09 (0.19)
Bold Point, RI	Crab	7.04 (2.54)	0.05 (0.01)	0.04 (0.02)	0.03 (0.01)	0.26 (0.16)	3.63 (1.05)
Bold Point, RI	Fundulus	2.23 (1.05)	0.43 (1.12)	0.08 (0.02)	0.07 (0.02)	0.31 (0.13)	1.5 (0.64)
Bold Point, RI	Mussel	9.68 (5.51)	3.67 (1.31)	0.08 (0.01)	0.05 (0.01)	2.18 (0.65)	3.58 (0.98)
Bold Point, RI	Shrimp	7.29 (0.81)	0.37 (0.36)	0.06 (0.01)	0.05 (0.02)	1.15 (0.79)	1.25 (0.04)
Greenwich, RI	Amphipod	3.76 (0.39)	0.2 (0.01)	0.11 (0)	0.1 (0)	1.76 (0.32)	1.96 (0.24)
Greenwich, RI	Crab	7.54 (3.8)	0.14 (0.09)	0.16 (0.07)	0.07 (0.03)	0.12 (0.06)	4.64 (1.94)
Greenwich, RI	Fundulus	1.79 (0.6)	0.01 (0.02)	0.09 (0.04)	0.08 (0.03)	0.26 (0.12)	1.03 (0.31)
Greenwich, RI	Mussel	7.94 (3.78)	0.25 (0.06)	0.2 (0.02)	0.14 (0.02)	0.84 (0.34)	4.37 (2.44)
Greenwich, RI	Shrimp	3.16 (0.94)	0.16 (0)	0.13 (0.07)	0.13 (0.08)	0.24 (0.1)	1.07 (1.25)
MDI, ME	Amphipod	5.84 (1.07)	0.28 (0.03)	0.08 (0.01)	0.08 (0.01)	0.87 (0.2)	1.14 (0.13)
MDI, ME	Crab	6.46 (1.92)	0.46 (0.29)	0.06 (0.03)	0.05 (0.03)	0.62 (0.24)	2.89 (1.21)
MDI, ME	Fundulus	2.89 (0.11)	0.09 (0.02)	0.08 (0)	0.08 (0.02)	0.39 (0.04)	2.11 (0.25)
MDI, ME	Mussel	8.63 (2.81)	1.87 (0.63)	0.16 (0.08)	0.07 (0.02)	3.9 (3.38)	3.57 (1.21)
MDI, ME	Shrimp	8.66 (0.55)	0.9 (0.22)	0.08 (0.02)	0.08 (0.01)	0.77 (0.63)	1.81 (0.47)
Portsmouth Harbor, NH	Amphipod	6.04 (1.3)	0.1 (0.01)	0.04 (0.01)	0.02 (0)	1.15 (0.28)	0.85 (0.25)
Portsmouth Harbor, NH	Crab	6.74 (1.47)	0.3 (0.15)	0.07 (0.02)	0.06 (0.02)	1.5 (0.5)	1.35 (0.31)
Portsmouth Harbor, NH	Fundulus	3.53 (0.5)	0.06 (0.02)	0.16 (0.06)	0.16 (0.06)	1.37 (0.9)	3.11 (0.38)
Portsmouth Harbor, NH	Mussel	12.24 (2.9)	2.28 (1.22)	0.55 (0.33)	0.15 (0.03)	4.29 (2.57)	4.09 (0.66)
Portsmouth Harbor, NH	Shrimp	5.07 (0.41)	0.35 (0.12)	0.1 (0.02)	0.05 (0.02)	2.78 (0.51)	1.59 (0.49)
Wells	Amphipod	8 (1.17)	0.23 (0.02)	0.04 (0)	0.03 (0)	2.17 (0.25)	2.39 (0.08)
Wells	Crab	7.25 (2.15)	0.16 (0.01)	0.04 (0.01)	0.03 (0.01)	0.68 (0.21)	2.71 (0.9)
Wells	Fundulus	2.43 (0.67)	0.19 (0.13)	0.05 (0.03)	0.04 (0.01)	0.19 (0.21)	2.14 (0.39)
Wells	Mussel	10.77 (0.58)	1.25 (0.31)	0.23 (0.02)	0.14 (0.01)	2.14 (0.5)	4.28 (0.56)
Wells	Shrimp	5.59 (0.51)	0.49 (0.06)	0.04 (0)	0.03 (0)	0.43 (0.05)	0.47 (0.16)

Table S2. Biotic Stable Isotopes. Mean stable isotopes values (and standard deviations) for each taxonomic group at each site and mean values for each taxa across sites.

Taxa	Site	¹³ C	¹⁵ N
Amphipod	Adams	-17.0 (1.4)	7.4 (1.4)
Amphipod	Bold Point	-15.4 (0.5)	11.7 (0.1)
Amphipod	Greenwich	-20.7 (1.6)	8.6 (0.2)
Amphipod	MDI	-16.4 (0.1)	9.6 (0.6)
Amphipod	Portsmouth	-19.1 (1.5)	7.8 (1.7)
Amphipod	Wells	-15.8 (0.8)	6.1 (0.5)
Amphipod mean		-17.4	8.5
Crab	Adams	-15.2 (1.6)	12.8 (0.8)
Crab	Bold Point	-16.6 (3.3)	12.8 (1.7)
Crab	Greenwich	-14.3 (0.9)	10.9 (0.5)
Crab	MDI	-14.7 (1.3)	10.9 (0.5)
Crab	Portsmouth	-15.4 (1.1)	11.2 (0.7)
Crab	Wells	-14.6 (1.1)	9.8 (1.0)
Crab mean		-15.1	11.4

<i>Fundulus</i>	Adams	-17.5 (0.3)	13.8 (0.3)
<i>Fundulus</i>	Bold Point	-17.3 (0.8)	15.2 (0.5)
<i>Fundulus</i>	Greenwich	-16.6 (0.7)	14.1 (1.6)
<i>Fundulus</i>	MDI	-17.1 (0.2)	10.5 (0.2)
<i>Fundulus</i>	Portsmouth	-18.1 (1.0)	12.4 (0.3)
<i>Fundulus</i>	Wells	-17.2 (0.3)	9.1 (0.5)
<i>Fundulus</i> mean		-17.3	12.5
Mussel	Adams	-20.6 (0.5)	8.9 (0.4)
Mussel	Bold Point	-21.1 (1.2)	9.9 (0.8)
Mussel	Greenwich	-19.7 (2.2)	10.5 (1.0)
Mussel	MDI	-19.3 (0.5)	8.6 (0.3)
Mussel	Portsmouth	-19.8 (0.5)	7.9 (0.3)
Mussel	Wells	-20.2 (0.3)	7.2 (0.2)
Mussel mean		-20.1	8.8
Shrimp	Adams	-16.5 (0.5)	12.1 (0.8)
Shrimp	Bold Point	-16.2 (0.4)	14.3 (0.4)
Shrimp	Greenwich	-16.5 (0.9)	11.8 (0.4)
Shrimp	MDI	-14.5 (0.6)	10.8 (0.3)
Shrimp	Portsmouth	-14.6 (0.8)	10.2 (0.8)
Shrimp	Wells	-15.0 (0.3)	9.3 (0.7)
Shrimp mean		-15.4	11.3

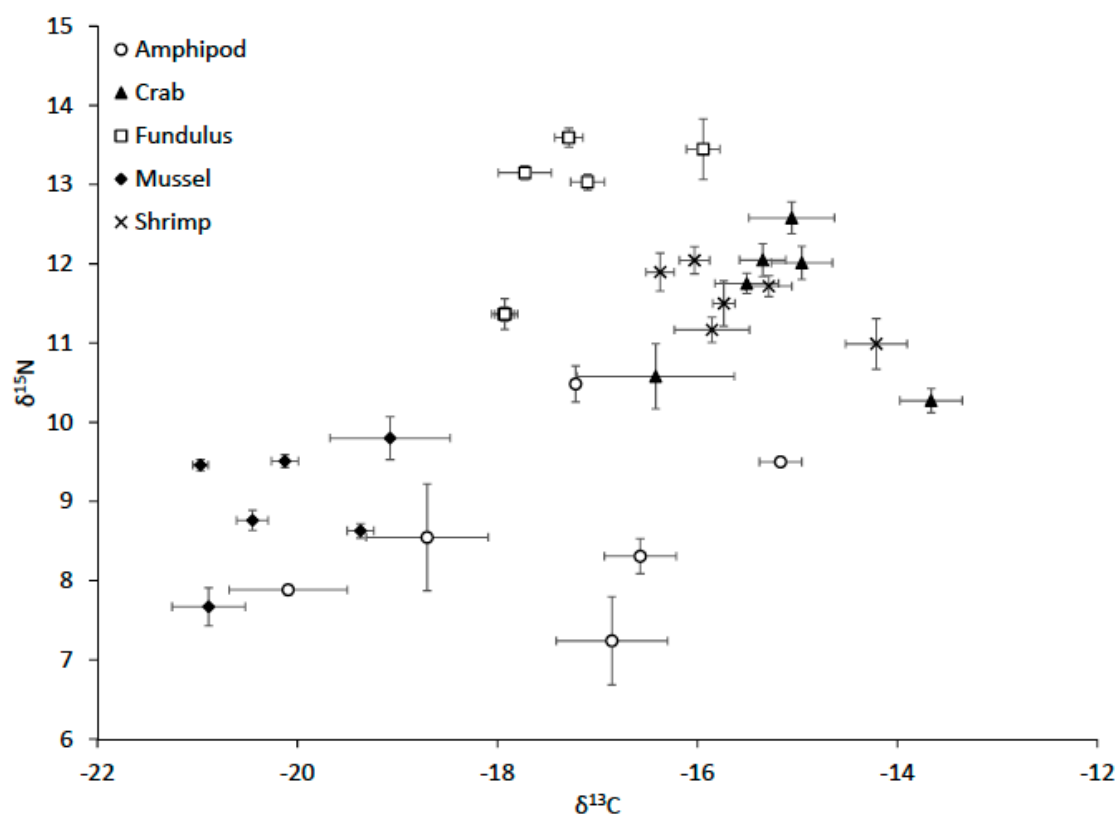


Figure S1. Stable isotope signatures of biotic species. Average delta ^{13}C and ^{15}N values for each species at each site, centered on the grand mean to remove across-site variation. Reported as mean $\pm$ SE.