

Electronic supplementary material

Compensatory responses can alter the form of the biodiversity-function relation curve

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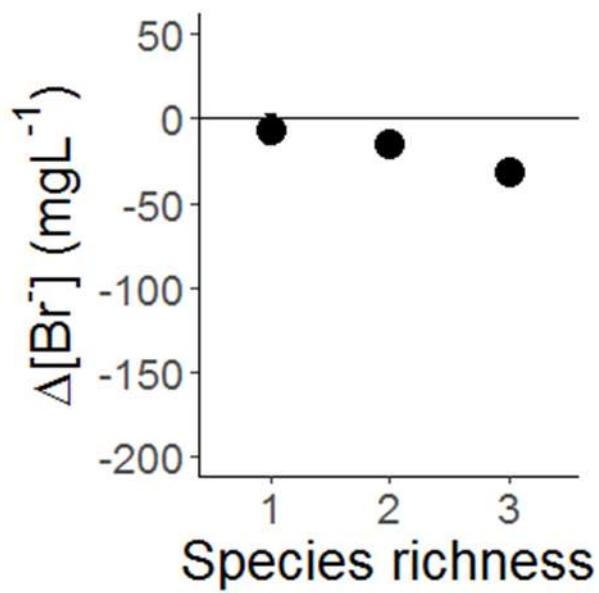


Figure S1. Burrow ventilation ($[\text{Br}] \Delta, \text{mg L}^{-1}$, mean \pm s.e., $n = 4$) in even ($J^{1.00}$) community assemblages across levels of species richness.

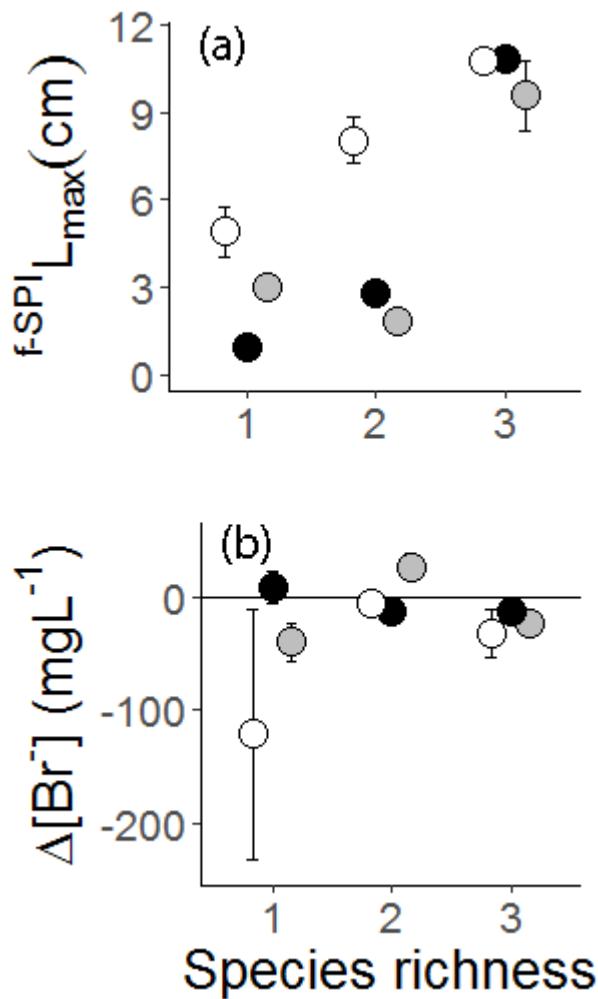


Figure S2. Effects of species richness and extinction scenario (random [white], body size [black], rarity [grey]) in natural ($J^{0.67}$) community assemblages on maximum mixing depth of particle reworking ($f\text{-SPI}L_{\max}$, cm, mean \pm s.e., $n = 4$) and burrow ventilation ($\Delta[\text{Br}^-]$, mg L^{-1} , mean \pm s.e., $n = 4$).

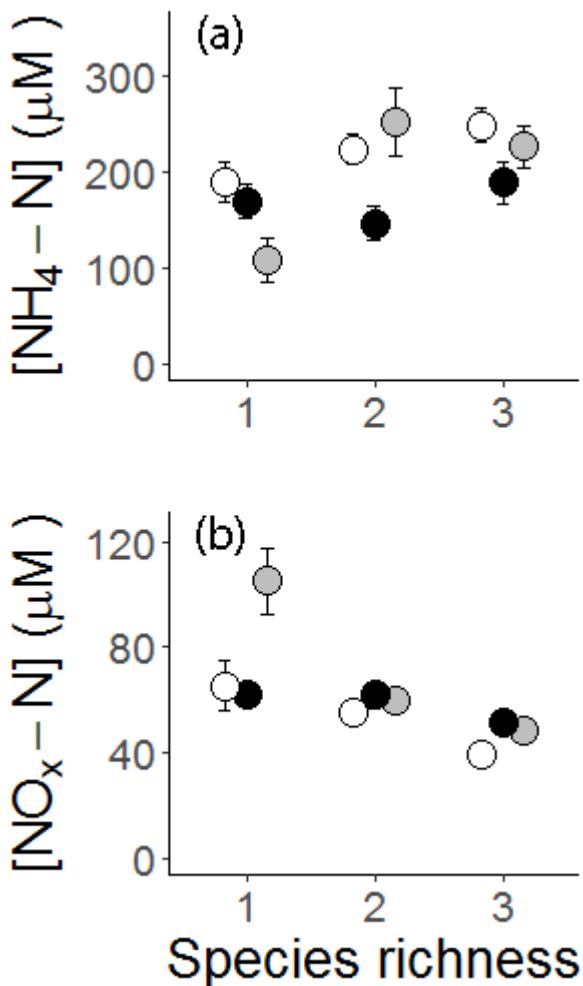


Figure S3. Effects of species richness and extinction scenario (random [white], body size [black], rarity [grey]) in natural ($J^{0.67}$) community assemblages on $\text{NH}_4\text{-N}$ and $\text{NO}_x\text{-N}$ concentrations ($[\text{NH}_4\text{-N}], [\text{NO}_x\text{-N}], \mu\text{M}$, mean \pm s.e., $n = 4$).

Table S1. The distribution of biomass between species for each scenario of extinction (random, body size, rarity) and compensatory response (NoComp, no compensation; Comp, full compensation) in even communities (J^1). All permutations were replicated ($n = 4$). Controls containing no macrofauna are not included.

Extinction scenario and response	Community assembly	Total biomass	<i>Peringia ulvae</i> (P)	<i>Corophium volutator</i> (C)	<i>Hediste diversicolor</i> (H)
Random × NoComp	P	0.667	0.667	0.000	0.000
Random × NoComp	C	0.667	0.000	0.667	0.000
Random × NoComp	H	0.667	0.000	0.000	0.667
Random × NoComp	PC	1.333	0.667	0.667	0.000
Random × NoComp	PH	1.333	0.667	0.000	0.667
Random × NoComp	HC	1.333	0.000	0.667	0.667
Random × NoComp	PCH	2.000	0.667	0.667	0.667
Random × Comp	H	2.000	2.000	0.000	0.000
Random × Comp	C	2.000	0.000	2.000	0.000
Random × Comp	H	2.000	0.000	0.000	2.000
Random × Comp	PC	2.000	1.000	1.000	0.000

Random × Comp	PH	2.000	1.000	0.000	1.000
Random × Comp	HC	2.000	0.000	1.000	1.000
Random × Comp	PCH	2.000	0.667	0.667	0.667
Body size × NoComp	PCH	2.000	0.667	0.667	0.667
Body size × NoComp	PC	1.333	0.667	0.667	0.000
Body size × NoComp	P	0.667	0.667	0.000	0.000
Body size × Comp	PCH	2.000	0.667	0.667	0.667
Body size × Comp	PC	2.000	1.000	1.000	0.000
Body size × Comp	P	2.000	2.000	0.000	0.000
Rarity × NoComp	PCH	2.000	0.667	0.667	0.667
Rarity × NoComp	PC	1.333	0.667	0.667	0.000
Rarity × NoComp	C	0.667	0.000	0.667	0.000
Rarity × Comp	PCH	2.000	0.667	0.667	0.667
Rarity × Comp	PC	2.000	1.000	1.000	0.000
Rarity × Comp	C	2.000	0.000	2.000	0.000

Table S2. Experimental design for each scenario of extinction and compensatory response (n=4) and community assembly and biomass in communities representative of natural evenness ($J^{0.67}$). Controls (n=4) not included in this table.

Extinction scenario and response	Community assembly	Total biomass	<i>Peringia ulvae (P)</i>	<i>Corophium volutator (C)</i>	<i>Hediste diversicolor (H)</i>
Random × NoComp	P	1.584	1.584	0.000	0.000
Random × NoComp	C	0.101	0.000	0.101	0.000
Random × NoComp	H	0.144	0.000	0.000	0.144
Random × NoComp	PC	1.685	1.584	0.101	0.000
Random × NoComp	PH	1.728	1.584	0.000	0.144
Random × NoComp	HC	0.245	0.000	0.101	0.144
Random × NoComp	PCH	1.829	1.584	0.101	0.144
Random × Comp	P	1.829	1.829	0.000	0.000
Random × Comp	C	1.829	0.000	1.829	0.000
Random × Comp	H	1.829	0.000	0.000	1.829
Random × Comp	PC	1.829	1.656	0.173	0.000
Random × Comp	PH	1.829	1.635	0.000	1.194
Random × Comp	HC	1.829	0.000	0.893	0.936
Random × Comp	PCH	1.829	1.584	0.101	0.144
Body size × NoComp	PCH	1.829	1.584	0.101	0.144
Body size × NoComp	PC	1.685	1.584	0.101	0.000
Body size × NoComp	P	1.584	1.584	0.000	0.000
Body size × Comp	PCH	1.829	1.584	0.101	0.144
Body size × Comp	PC	1.829	1.656	0.173	0.000
Body size × Comp	P	1.829	1.829	0.000	0.000
Rarity × NoComp	PCH	1.829	1.584	0.101	0.144
Rarity × NoComp	PC	1.685	1.584	0.101	0.000
Rarity × NoComp	C	0.101	0.000	0.101	0.000
Rarity × Comp	PCH	1.829	1.584	0.101	0.144
Rarity × Comp	PC	1.829	1.656	0.173	0.000
Rarity × Comp	C	1.829	0.000	1.829	0.000

Statistical model summary

Summary of statistical models (Model S1 to S14), for even communities (Model S1 to S7) and uneven communities (Model S8 to S14). For each model, we list the initial linear regression model and the minimal adequate model. As the experiment could not be assembled simultaneously, the timing of each run forms a random factor (run). Where it was necessary to account for violation of homogeneity of variance, we used a linear regression with GLS estimation. Hence, where appropriate, we provide a summary of the coefficient table. The coefficients indicate the relative performance of each level relative to the baseline, as indicated. Coefficients \pm SE, t-values and significance values are presented.

Statistical models for the effect of compensation and extinction order

(i) Even (J^1) communities

Model S1 | Surface boundary roughness (SBR, cm)

Initial linear regression model:

```
lme(SBR~Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  method = "ML")
```

No minimal adequate model, intercept only (L-ratio = 4.1847, d.f. = 2, p = 0.1234).

Model S2 | Median maximum mixed depth of particle reworking ($f\text{-SPI}L_{med}$, cm)

Initial linear regression model:

```
lme( $f\text{-SPI}L_{med}$  ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

Minimal adequate model:

```
lme( $f\text{-SPI}L_{med}$  ~ Compensation+Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

	d.f.	AIC	L-Ratio	p-value
Full model	11	-6.313776		
Compensation	8	0.081480	8.395256	0.0038
Extinction	9	3.638944	13.95272	9e-04

Coefficient Table

Intercept \pm SE (when baseline is for random): 0.7062 ± 0.0439 , $t = 16.083$, $p = 0.0000$.

Bodysize		Bodysize	
Random	0.0039 ± 0.0497 0.0780 (0.9380)		Random
	0.1526 ± 0.0492 3.103 (0.0025)	0.1564 ± 0.0432 3.6231 (0.0005)	Rarity

Model S3 | Maximum mixed depth of particle reworking ($f\text{-SPI}L_{max}$, cm)

Initial linear regression model:

```
lme(f SPI L_max ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  method = "ML")
```

Minimal adequate model:

```
lme(f SPI L_max ~ Extinction,
  random = ~1|as.factor(Run),
  method = "ML")
```

	d.f	AIC	L-Ratio	p-value
Full model	5	602.7047		
Extinction	3	605.1285	6.423848	0.0403

Coefficient Table

Intercept \pm SE (when baseline is for Random): 7.2715 ± 0.5670 , $t = 12.825$, $p = 0.0000$.

Bodysize		Bodysize	
Random	2.2838 ± 1.0352 2.206 (0.0297)		Random
	0.3623 ± 1.2248 0.2958 (0.7680)	1.9215 ± 1.0352 1.8563 (0.0664)	Rarity

Model S4 | Ammonium concentration (NH₄-N, μ M)

Initial linear regression model:

```
lme(NH4-N ~ Compensation+Extinction+
  Compensation:Extinction,
```

```

random = ~1|as.factor(Run),
weights = varIdent(form=~1|Extinction*Compensation),
method = "ML")

```

Minimal adequate model:

```

lme(NH4-N~Compensation+Extinction+
    Compensation:Extinction,
    random = ~1|as.factor(Run),
    weights = varIdent(form=~1|Extinction*Compensation),
    method = "ML")

```

	d.f	AIC	L-Ratio	p-value
Full model	13	1151.580		
Compensation	5	1171.858	26.27831	<.0001
Extinction	4	1173.514	29.93443	<.0001
Compensation:Extinction	11	1173.856	26.27567	<.0001

Coefficient Table

Intercept \pm SE (when baseline is for Random): 254.5726 ± 20.5701 , $t = 12.3759$, $p = 0.0000$.

	Bodysize	Bodysize	
Random	73.9026 ± 26.8884 -2.7485 (0.0072)	Random	
Rarity	177.9345 ± 17.3182 10.2744 (0.0000)	251.8370 ± 20.5716 12.2420 (0.0000)	Rarity

Model S5 | Nitrate + nitrite concentration ($\text{NO}_x\text{-N}$, μM)

Initial linear regression model:

```

lme(NOx-N~Compensation+Extinction+
    Compensation:Extinction,
    random = ~1|as.factor(Run),
    weights = varIdent(form=~1|Extinction*Compensation),
    method = "ML")

```

Minimal adequate model:

```

lme(NOx-N ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")

```

	d.f	AIC	L-Ratio	p-value
Full model	13	891.5928		
Compensation	10	911.4338	25.84106	<.0001
Extinction	9	910.4265	26.83378	<.0001
Compensation:Extinction	11	912.7062	25.11348	<.0001

Model S6 | Phosphate concentration (PO₄-P, μM)

Initial linear regression model:

```

lme(PO4-P ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  method = "ML")

```

Minimal adequate model:

```

lme(PO4-P ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  method = "ML")

```

	d.f	AIC	L-Ratio	p-value
Full model	13	426.4792		
Compensation	10	441.0710	20.59183	1e-04
Extinction	9	439.6768	21.19764	3e-04
Compensation:Extinction	11	430.7855	8.306257	0.0157

Model S7 | Bromide concentration (Br, mg l⁻¹)

Initial linear regression model:

```

lme(Bromide~Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  method = "ML")

```

No minimal adequate model, intercept only only (L-ratio = 1.376575, d.f. = 2, p = 0.5024).

(ii) Uneven ($J^{0.67}$) communities

Model S8 | Surface boundary roughness (SBR, cm)

Initial linear regression model:

```
lme(SBR~Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction),
  method = "ML")
```

No minimal adequate model, intercept only (L-ratio = 0.8632205, d.f. = 1, p = 0.3528).

Model S9 | Median maximum mixed depth of particle reworking ($f\text{-SPI}L_{med}$, cm)

Initial linear regression model:

```
lme( $f\text{-SPI}L_{med}$  ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

Minimal adequate model:

```
lme( $f\text{-SPI}L_{med}$  ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

	d.f	AIC	L-Ratio	p-value
Full model	13	-113.01783		
Compensation	5	-100.1075	18.91028	3e-04
Extinction	9	-99.22558	21.79225	2e-04
Compensation:Extinction	11	-98.33025	18.68758	1e-04

Model S10 | Maximum mixed depth of particle reworking ($f\text{-SPI}L_{max}$, cm)

Initial linear regression model:

```
lme( $f\text{-SPI}L_{max}$  ~ Compensation+Extinction+
  Compensation:Extinction,
```

```
random = ~1|as.factor(Run),
method = "ML")
```

Minimal adequate model:

```
lme(f-SPImax ~ Extinction,
     random = ~1|as.factor(Run),
     method = "ML")
```

	d.f	AIC	L-Ratio	p-value
Full model	5	602.3072		
Extinction	3	605.1449	6.837739	0.0327

Coefficient Table

Intercept \pm SE (when baseline is for Random): 6.2223 ± 1.2318 , $t = 5.0515$, $p = 0.0000$.

	Bodysize	Bodysize	
Random	2.2279 ± 1.0150 2.195 (0.0305)		Random
Rarity	0.8104 ± 1.2855 0.6305 (0.5298)	1.4174 ± 1.1140 1.2723 (0.2062)	Rarity

Model S11 | Ammonium concentration ($\text{NH}_4\text{-N}$, μM)

Initial linear regression model:

```
lme(NH4-N ~ Compensation+Extinction+
     Compensation:Extinction,
     random = ~1|as.factor(Run),
     weights = varIdent(form=~1|Extinction*Compensation),
     method = "ML")
```

Minimal adequate model:

```
lme(NH4-N ~ Extinction,
     random = ~1|as.factor(Run),
     weights = varIdent(form=~1|Extinction*Compensation),
     method = "ML")
```

	d.f	AIC	L-Ratio	p-value
Full model	10	1211.747		

Extinction	8	1213.807	6.059796	0.0483
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Coefficient Table

Intercept \pm SE (when baseline is for Random): 221.50584 ± 27.19878 , $t = 8.143963$, $p = 0.0000$.

Bodysize		Bodysize	
Random	31.3621 ± 13.2623 2.3648 (0.0200)	21.4157 ± 22.0989 0.9691 (0.3349)	Random
Rarity	9.9464 ± 21.7136 0.4581 (0.6479)		Rarity

Model S12 | Nitrate + nitrite concentration ($\text{NO}_x\text{-N}$, μM)

Initial linear regression model:

```
lme(NOx-N ~ Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

Minimal adequate model:

```
lme(NOx-N ~ Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

	d.f	AIC	L-Ratio	p-value
Full model	10	939.2344		
Extinction	8	943.3458	8.111428	0.0173

Coefficient Table

Intercept \pm SE (when baseline is for Random): 51.57836 ± 4.167782 , $t = 12.375494$, $p = 0.0000$.

Bodysize	Bodysize
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Random	6.5217 ± 3.0130 2.1645 (0.0328)	Random
Rarity	7.8774 ± 5.6148 1.4029 (0.1638)	14.3991 ± 5.6359 2.5549 (0.0121)

Model S13 | Phosphate concentration (PO₄-P, μM)

Initial linear regression model:

```
lme(PO4~Compensation+Extinction+
  Compensation:Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

Minimal adequate model:

```
lme(PO4-P ~Extinction,
  random = ~1|as.factor(Run),
  weights = varIdent(form=~1|Extinction*Compensation),
  method = "ML")
```

	d.f	AIC	L-Ratio	p-value
Full model	10	497.0147		
Extinction	8	505.8557	12.841	0.0016

Coefficient Table

Intercept ± SE (when baseline is for Random): 3.218481 ± 5.159960 , t = 12.3759, p = 0.0000.

	Bodysize	Bodysize	
Random	0.3212 ± 0.7557 0.4251 (0.6717)	Random	
Rarity	1.8137 ± 0.6568 2.7617 (0.0069)	1.4925 ± 0.4370 3.4154 (0.0009)	Rarity

Model S14 | Bromide concentration (Br, μM)

Initial linear regression model:

```
lme(Bromide~Compensation,  
    random = ~1|as.factor(Run),  
    weights = varIdent(form=~1|Extinction*Compensation),  
    method = "ML")
```

No minimal adequate model, intercept only (L-ratio = 3.83717, d.f. = 2, p = 0.1468).

Data S1 | Summary of data used for statistical analysis. Data in the absence of macrofauna is shown for comparison but was not included in the statistical analyses. Treatment = compensatory response (Comp = full biomass compensation, NoComp = no biomass compensation), Species = Community composition (H = *Hediste diversicolor*, P = *Peringia ulvae*, C = *Corophium volutator*), Run = experimental run.

Extinction	Treatment	Species	Evenness (J)	Total biomass	Run	Replicate	SBR (cm)	f-SPI L _{med} (cm)	f-SPI L _{max} (cm)	Δ[Br ⁻] (mg L ⁻¹)	[NO _x -N] (μM)	[NH ₄ -N] (μM)	[PO ₄ -P] (μM)
Bodysize	Comp	P	0.67	1.829	2	1	0.396	0.433	1.067	15.582	56.650	180.171	1.107
Bodysize	Comp	P	0.67	1.829	2	2	0.314	0.433	1.004	-16.298	58.441	197.454	1.756
Bodysize	Comp	P	0.67	1.829	2	3	0.433	0.452	0.785	47.651	52.048	210.474	8.940
Bodysize	Comp	P	0.67	1.829	2	4	0.274	0.427	1.023	-8.612	77.150	122.899	3.631
Bodysize	Comp	PC	0.67	1.829	2	1	0.511	0.414	3.409	0.523	85.856	104.664	1.827
Bodysize	Comp	PC	0.67	1.829	1	2	0.697	0.483	2.022	8.773	61.889	200.098	8.758
Bodysize	Comp	PC	0.67	1.829	1	3	0.709	0.477	2.285	-31.754	46.488	212.224	1.597
Bodysize	Comp	PC	0.67	1.829	1	4	0.748	0.414	3.296	-11.141	55.585	130.412	1.791
Bodysize	Comp	PCH	0.67	1.829	1	1	0.480	0.534	11.162	-21.901	45.340	165.979	1.357
Bodysize	Comp	PCH	0.67	1.829	2	2	0.523	0.458	10.874	-26.254	57.606	173.117	1.175
Bodysize	Comp	PCH	0.67	1.829	1	3	0.617	0.439	10.754	7.052	45.089	189.760	0.383
Bodysize	Comp	PCH	0.67	1.829	2	4	0.810	0.458	10.108	-5.509	60.565	154.674	1.901
Bodysize	NoComp	P	0.67	1.584	1	1	0.386	0.433	0.942	-12.148	79.724	100.185	3.095
Bodysize	NoComp	P	0.67	1.584	2	2	0.402	0.452	0.766	-54.998	60.655	119.833	0.007
Bodysize	NoComp	P	0.67	1.584	2	3	0.408	0.452	0.954	67.582	57.353	197.615	9.202
Bodysize	NoComp	P	0.67	1.584	1	4	0.458	0.433	1.017	23.691	57.335	229.451	9.471
Bodysize	NoComp	PC	0.67	1.685	1	1	0.986	0.458	1.764	-55.578	52.451	193.073	1.671
Bodysize	NoComp	PC	0.67	1.685	2	2	0.723	0.515	2.241	5.785	78.630	81.598	1.318
Bodysize	NoComp	PC	0.67	1.685	1	3	0.960	0.596	2.888	-1.628	60.830	101.526	1.642
Bodysize	NoComp	PC	0.67	1.685	2	4	0.860	0.433	4.307	-16.222	53.695	148.821	2.019
Bodysize	NoComp	PCH	0.67	1.829	1	1	0.654	0.502	11.181	-15.919	56.476	164.560	1.134
Bodysize	NoComp	PCH	0.67	1.829	1	2	0.660	0.603	10.767	-18.405	54.030	135.372	1.320

Bodysize	NoComp	PCH	0.67	1.829	1	3	0.436	0.414	10.918	-26.690	50.552	197.546	1.515
Bodysize	NoComp	PCH	0.67	1.829	1	4	0.377	0.402	11.100	-2.454	45.230	330.927	8.879
Random	Comp	C	0.67	1.829	1	1	0.592	1.249	3.930	-43.426	165.871	72.549	2.155
Random	Comp	C	0.67	1.829	2	2	0.885	0.954	3.622	58.391	119.299	129.909	2.233
Random	Comp	C	0.67	1.829	1	3	0.461	1.425	3.629	-8.263	177.907	19.847	2.144
Random	Comp	C	0.67	1.829	1	4	1.103	0.458	4.495	-18.647	144.191	58.682	2.165
Random	Comp	P	0.67	1.829	1	1	0.339	0.439	0.879	-41.813	56.290	145.860	0.343
Random	Comp	P	0.67	1.829	1	2	0.548	0.465	0.973	-16.612	77.277	116.929	3.092
Random	Comp	P	0.67	1.829	1	3	0.287	0.427	0.979	-30.730	73.349	157.188	3.625
Random	Comp	P	0.67	1.829	2	4	0.301	0.414	1.092	24.556	58.337	206.452	9.351
Random	Comp	PC	0.67	1.829	1	1	0.716	0.396	1.532	14.093	68.157	220.312	1.646
Random	Comp	PC	0.67	1.829	2	2	0.660	0.477	3.095	4.300	82.867	91.662	1.307
Random	Comp	PC	0.67	1.829	1	3	0.634	0.490	2.725	-6.477	48.360	233.088	8.844
Random	Comp	PC	0.67	1.829	1	4	0.665	0.458	3.924	-24.631	55.862	211.776	1.829
Random	Comp	PCH	0.67	1.829	2	1	1.078	0.521	11.150	6.213	66.435	172.891	1.404
Random	Comp	PCH	0.67	1.829	2	2	0.698	0.465	11.709	-28.384	36.007	253.330	0.773
Random	Comp	PCH	0.67	1.829	1	3	0.559	0.433	10.893	3.970	31.956	300.685	0.670
Random	Comp	PCH	0.67	1.829	2	4	0.586	0.515	11.006	-4.039	44.004	197.652	0.741
Random	Comp	PH	0.67	1.829	2	1	0.471	0.433	10.610	-38.327	37.381	266.140	0.603
Random	Comp	PH	0.67	1.829	1	2	0.521	0.421	10.742	-5.851	28.226	327.998	7.777
Random	Comp	PH	0.67	1.829	2	3	0.399	0.471	10.397	14.785	93.482	299.074	1.301
Random	Comp	PH	0.67	1.829	2	4	0.540	0.458	9.932	-48.823	47.700	343.413	0.978
Random	Comp	H	0.67	1.829	1	1	0.753	0.389	10.698	-35.693	6.128	469.898	7.226
Random	Comp	H	0.67	1.829	2	2	0.622	0.364	10.541	-21.930	7.277	465.058	0.173
Random	Comp	H	0.67	1.829	1	3	0.542	0.502	10.836	-62.155	8.461	260.168	0.107
Random	Comp	H	0.67	1.829	1	4	0.710	0.339	10.710	-65.707	10.423	265.261	0.272
Random	Comp	HC	0.67	1.829	1	1	0.710	0.540	11.351	-37.011	42.655	301.520	1.153
Random	Comp	HC	0.67	1.829	1	2	1.469	0.634	11.181	-17.881	57.056	399.439	7.685
Random	Comp	HC	0.67	1.829	2	3	0.617	0.778	9.819	-42.219	66.122	225.665	1.044

Random	Comp	HC	0.67	1.829	2	4	1.047	0.678	10.403	-28.163	56.828	248.752	0.897
Random	NoComp	C	0.67	0.101	1	1	0.684	0.248	2.963	8.748	60.133	155.156	8.271
Random	NoComp	C	0.67	0.101	1	2	0.748	0.289	4.326	19.837	79.891	101.537	1.430
Random	NoComp	C	0.67	0.101	2	3	0.402	0.094	1.839	-37.329	62.440	179.507	1.203
Random	NoComp	C	0.67	0.101	2	4	0.530	0.283	0.810	-53.806	72.127	98.453	1.598
Random	NoComp	P	0.67	1.584	1	1	0.345	0.427	0.910	17.617	56.372	204.938	8.328
Random	NoComp	P	0.67	1.584	2	2	0.439	0.396	0.766	55.127	55.903	220.440	9.016
Random	NoComp	P	0.67	1.584	2	3	0.283	0.446	0.910	-27.582	58.237	216.766	9.334
Random	NoComp	P	0.67	1.584	1	4	0.207	0.446	1.017	19.062	57.303	192.141	1.294
Random	NoComp	PC	0.67	1.685	2	1	0.692	0.534	2.737	16.629	70.071	100.475	1.334
Random	NoComp	PC	0.67	1.685	2	2	0.449	0.477	4.753	-27.244	66.713	134.020	1.614
Random	NoComp	PC	0.67	1.685	1	3	0.966	0.427	2.819	41.581	60.842	121.386	1.653
Random	NoComp	PC	0.67	1.685	2	4	0.509	0.465	1.475	21.059	54.574	215.389	8.978
Random	NoComp	PCH	0.67	1.829	1	1	0.647	0.477	10.980	-31.459	32.945	289.634	1.119
Random	NoComp	PCH	0.67	1.829	2	2	0.571	0.439	10.729	-7.036	34.453	309.902	0.643
Random	NoComp	PCH	0.67	1.829	1	3	0.710	0.496	9.097	-176.035	40.953	205.433	1.334
Random	NoComp	PCH	0.67	1.829	1	4	0.691	0.465	10.710	-19.573	30.039	263.225	1.070
Random	NoComp	PH	0.67	1.728	1	1	0.370	0.427	10.384	-36.753	39.417	289.336	0.542
Random	NoComp	PH	0.67	1.728	2	2	0.399	0.427	10.623	-22.810	50.076	189.982	1.275
Random	NoComp	PH	0.67	1.728	2	3	0.417	0.477	10.648	45.482	55.964	169.967	0.582
Random	NoComp	PH	0.67	1.728	2	4	0.773	0.443	10.309	-20.245	45.128	213.397	1.123
Random	NoComp	H	0.67	0.144	1	1	0.527	0.132	9.398	-2630.081	41.876	225.801	7.050
Random	NoComp	H	0.67	0.144	1	2	0.461	0.242	11.062	-7.445	41.421	157.444	0.674
Random	NoComp	H	0.67	0.144	1	3	0.496	0.100	10.974	-12.256	40.580	173.088	0.118
Random	NoComp	H	0.67	0.144	1	4	0.753	0.163	10.541	2.078	40.691	261.225	7.403
Random	NoComp	HC	0.67	0.245	1	1	0.816	0.308	11.093	17.542	39.576	229.678	0.422
Random	NoComp	HC	0.67	0.245	2	2	1.333	0.276	10.478	10.244	53.603	120.772	0.989
Random	NoComp	HC	0.67	0.245	1	3	0.433	0.314	10.867	9.282	44.287	252.188	7.132
Random	NoComp	HC	0.67	0.245	2	4	0.654	0.295	11.087	10.772	58.091	164.772	0.370

Rarity	Comp	C	0.67	1.829	2	1	0.596	1.174	3.152	-123.948	90.375	232.877	2.157
Rarity	Comp	C	0.67	1.829	1	2	0.928	1.365	4.847	-13.828	160.564	15.446	1.509
Rarity	Comp	C	0.67	1.829	2	3	0.654	0.954	3.271	-56.320	156.395	68.941	1.629
Rarity	Comp	C	0.67	1.829	1	4	0.791	0.891	2.241	-72.204	103.736	128.818	0.996
Rarity	Comp	PC	0.67	1.829	3	1	0.597	0.536	2.843	31.575	66.320	5.760	2.780
Rarity	Comp	PC	0.67	1.829	3	2	0.390	0.469	2.384	5.065	57.910	281.830	2.460
Rarity	Comp	PC	0.67	1.829	3	3	0.643	0.473	1.692	77.383	56.270	299.690	2.830
Rarity	Comp	PC	0.67	1.829	3	4	0.583	0.443	1.274	51.583	63.700	307.120	2.720
Rarity	Comp	PCH	0.67	1.829	2	1	0.349	0.439	10.867	5.104	56.687	184.019	0.893
Rarity	Comp	PCH	0.67	1.829	2	2	0.536	0.471	10.397	3.197	62.957	133.148	0.722
Rarity	Comp	PCH	0.67	1.829	1	3	0.521	0.477	10.704	-41.181	31.180	298.223	0.831
Rarity	Comp	PCH	0.67	1.829	2	4	0.565	0.414	10.679	-22.288	47.414	231.648	0.849
Rarity	NoComp	C	0.67	0.101	2	1	0.723	0.509	2.744	-50.222	93.662	94.538	1.692
Rarity	NoComp	C	0.67	0.101	2	2	0.640	0.295	2.160	29.639	57.481	151.209	7.750
Rarity	NoComp	C	0.67	0.101	1	3	0.854	0.308	2.536	-24.474	76.534	85.565	1.441
Rarity	NoComp	C	0.67	0.101	1	4	0.561	0.358	2.882	-6.891	101.049	90.724	1.570
Rarity	NoComp	PC	0.67	1.685	3	3	0.467	0.455	1.716	19.754	54.090	298.830	2.660
Rarity	NoComp	PC	0.67	1.685	3	1	0.473	0.461	1.316	-1.978	63.460	268.480	2.970
Rarity	NoComp	PC	0.67	1.685	3	2	0.368	0.489	1.739	-23.766	59.530	271.610	2.440
Rarity	NoComp	PC	0.67	1.685	3	4	0.299	0.440	2.047	49.420	56.820	281.290	2.310
Rarity	NoComp	PCH	0.67	1.829	1	1	0.552	0.433	10.962	-69.001	40.290	286.543	0.959
Rarity	NoComp	PCH	0.67	1.829	1	2	0.598	0.496	10.911	11.490	50.147	172.692	1.016
Rarity	NoComp	PCH	0.67	1.829	2	3	0.679	0.427	10.554	-21.035	55.523	213.651	1.277
Rarity	NoComp	PCH	0.67	1.829	1	4	0.446	0.414	1.400	-59.946	46.079	293.506	0.891
Bodysize	Comp	P	1	2.000	2	1	0.326	0.421	0.709	-20.179	56.231	218.753	1.785
Bodysize	Comp	P	1	2.000	2	2	0.414	0.452	0.797	2.414	54.648	233.608	8.976
Bodysize	Comp	P	1	2.000	2	3	0.289	0.433	0.766	190.905	48.687	191.521	8.159
Bodysize	Comp	P	1	2.000	1	4	0.436	0.496	1.362	-4.749	73.937	103.201	2.422
Bodysize	Comp	PC	1	2.000	2	1	0.424	0.835	2.574	-8.770	114.279	77.944	2.077

Bodysize	Comp	PC	1	2.000	1	2	0.673	0.904	3.145	0.066	59.041	177.261	1.920
Bodysize	Comp	PC	1	2.000	2	3	0.904	0.841	2.938	-22.856	51.921	245.772	1.756
Bodysize	Comp	PC	1	2.000	2	4	0.536	1.074	3.572	31.068	90.208	98.308	1.685
Bodysize	Comp	PCH	1	2.000	2	1	0.835	0.804	12.067	-100.495	62.242	212.827	1.255
Bodysize	Comp	PCH	1	2.000	2	2	0.922	0.656	10.823	-39.453	37.824	266.926	1.146
Bodysize	Comp	PCH	1	2.000	2	3	0.548	0.697	11.018	-61.378	83.276	165.141	0.993
Bodysize	Comp	PCH	1	2.000	1	4	0.760	0.760	10.936	0.717	78.657	176.780	1.272
Bodysize	NoComp	P	1	0.667	2	1	0.527	0.358	0.898	93.293	52.081	107.595	7.630
Bodysize	NoComp	P	1	0.667	2	2	0.523	0.396	0.898	-15.220	71.755	93.573	2.273
Bodysize	NoComp	P	1	0.667	1	3	0.383	0.402	0.804	10.929	58.903	163.016	1.005
Bodysize	NoComp	P	1	0.667	1	4	0.540	0.389	0.753	-23.208	63.225	138.611	0.129
Bodysize	NoComp	PC	1	1.333	1	1	1.187	0.590	2.756	-46.801	63.219	207.495	1.707
Bodysize	NoComp	PC	1	1.333	1	2	0.860	0.584	2.229	-30.130	66.444	168.480	1.921
Bodysize	NoComp	PC	1	1.333	1	3	1.331	0.703	3.039	-7.371	54.913	273.524	8.661
Bodysize	NoComp	PC	1	1.333	2	4	1.180	0.760	3.177	79.896	67.059	244.382	8.868
Bodysize	NoComp	PCH	1	2.000	2	1	0.380	0.929	11.884	-12.511	65.176	222.376	1.499
Bodysize	NoComp	PCH	1	2.000	1	2	0.766	0.609	10.484	-16.889	36.627	391.148	8.075
Bodysize	NoComp	PCH	1	2.000	2	3	0.854	0.584	11.244	7.508	45.319	321.718	8.381
Bodysize	NoComp	PCH	1	2.000	1	4	0.891	0.722	10.830	-103.050	49.982	346.495	1.768
Random	Comp	C	1	2.000	2	1	0.848	1.375	3.980	-65.093	105.826	209.332	1.722
Random	Comp	C	1	2.000	2	2	0.778	1.155	2.097	4.162	99.780	232.367	8.451
Random	Comp	C	1	2.000	2	3	1.122	1.300	3.221	-58.079	160.716	22.450	1.350
Random	Comp	C	1	2.000	1	4	0.978	1.281	5.826	-33.384	172.860	60.642	1.858
Random	Comp	P	1	2.000	1	1	0.498	0.446	0.860	106.259	79.247	115.310	3.131
Random	Comp	P	1	2.000	2	2	0.245	0.421	0.735	19.437	56.472	220.651	9.290
Random	Comp	P	1	2.000	1	3	0.283	0.458	0.804	-49.267	57.825	196.896	1.551
Random	Comp	P	1	2.000	2	4	0.349	0.458	1.174	21.670	75.426	103.123	2.078
Random	Comp	PC	1	2.000	2	1	0.760	0.778	3.918	-54.516	51.751	250.736	1.673
Random	Comp	PC	1	2.000	2	2	1.130	0.973	3.459	-58.946	52.030	258.853	1.673

Random	Comp	PC	1	2.000	2	3	1.055	0.822	3.158	-4.610	75.372	220.292	8.724
Random	Comp	PC	1	2.000	2	4	0.678	0.785	2.988	3.778	81.765	217.198	1.909
Random	Comp	PCH	1	2.000	1	1	0.698	0.647	11.012	-11.401	52.220	236.910	1.154
Random	Comp	PCH	1	2.000	2	2	0.791	0.860	11.200	-1.654	47.521	205.767	0.872
Random	Comp	PCH	1	2.000	2	3	0.935	0.578	10.484	-10.411	52.063	250.718	0.871
Random	Comp	PCH	1	2.000	1	4	0.735	0.465	10.384	-39.906	63.835	307.419	1.739
Random	Comp	PH	1	2.000	1	1	0.941	0.477	10.014	0.214	24.607	236.117	0.502
Random	Comp	PH	1	2.000	1	2	0.760	0.923	10.899	-55.179	13.819	196.687	0.048
Random	Comp	PH	1	2.000	1	3	0.461	0.471	10.792	6.609	16.740	281.090	0.070
Random	Comp	PH	1	2.000	2	4	0.804	0.609	10.780	-16.198	22.098	343.331	0.484
Random	Comp	H	1	2.000	1	1	0.779	0.320	10.139	-46.235	10.696	310.423	0.398
Random	Comp	H	1	2.000	2	2	0.542	0.565	10.773	-39.144	9.111	358.766	0.168
Random	Comp	H	1	2.000	2	3	0.571	0.458	10.792	-69.075	5.674	434.513	0.022
Random	Comp	H	1	2.000	1	4	0.703	0.565	11.087	-36.978	7.493	479.356	7.325
Random	Comp	HC	1	2.000	1	1	1.171	0.816	9.719	-23.262	69.666	227.774	1.640
Random	Comp	HC	1	2.000	2	2	0.848	0.841	10.767	-45.994	36.623	431.386	1.316
Random	Comp	HC	1	2.000	1	3	0.628	0.791	9.844	-39.926	47.076	347.732	1.219
Random	Comp	HC	1	2.000	2	4	0.879	0.659	10.284	31.833	36.985	372.195	1.063
Random	NoComp	C	1	0.667	1	1	0.753	0.791	3.572	-31.593	59.264	232.020	8.669
Random	NoComp	C	1	0.667	1	2	0.773	0.841	4.169	-8.917	108.228	64.596	1.739
Random	NoComp	C	1	0.667	1	3	1.538	0.854	3.076	-14.979	77.263	209.042	1.732
Random	NoComp	C	1	0.667	2	4	1.159	0.665	3.365	146.914	84.691	132.255	2.041
Random	NoComp	P	1	0.667	1	1	0.232	0.383	0.722	-33.807	63.906	146.046	2.499
Random	NoComp	P	1	0.667	2	2	0.498	0.377	0.735	-22.133	74.747	115.991	2.813
Random	NoComp	P	1	0.667	1	3	0.697	0.389	1.281	38.958	59.134	188.555	8.792
Random	NoComp	P	1	0.667	2	4	0.498	0.421	0.778	-49.069	81.342	111.188	3.381
Random	NoComp	PC	1	1.333	2	1	0.760	0.785	3.830	-38.010	81.167	99.304	1.684
Random	NoComp	PC	1	1.333	2	2	0.665	0.728	2.436	12.182	31.666	234.674	1.570
Random	NoComp	PC	1	1.333	2	3	1.134	0.496	3.095	-10.386	88.834	108.720	1.505

Random	NoComp	PC	1	1.333	2	4	0.629	0.810	3.152	-12.072	115.541	70.963	1.557
Random	NoComp	PCH	1	2.000	1	1	0.527	0.474	11.282	-22.300	46.288	368.744	0.879
Random	NoComp	PCH	1	2.000	2	2	1.171	0.866	12.600	-22.650	77.503	225.690	1.967
Random	NoComp	PCH	1	2.000	1	3	0.517	0.841	10.811	-48.575	77.146	190.956	1.176
Random	NoComp	PCH	1	2.000	1	4	0.542	0.600	10.453	-36.399	49.584	245.937	1.273
Random	NoComp	PH	1	1.333	2	1	0.424	0.458	11.200	2.029	24.262	268.110	0.792
Random	NoComp	PH	1	1.333	2	2	1.078	0.584	11.238	-16.389	20.352	296.204	0.473
Random	NoComp	PH	1	1.333	1	3	0.584	0.408	11.514	-19.540	25.095	367.764	7.882
Random	NoComp	PH	1	1.333	1	4	0.561	0.452	10.805	-19.997	21.237	285.335	0.045
Random	NoComp	H	1	0.667	2	1	0.716	0.239	10.535	-0.967	17.553	395.082	7.577
Random	NoComp	H	1	0.667	2	2	0.648	0.213	11.621	-40.888	30.183	214.433	0.119
Random	NoComp	H	1	0.667	2	3	0.928	0.364	10.447	-123.627	22.581	252.046	0.393
Random	NoComp	H	1	0.667	2	4	0.505	0.239	11.006	-4.764	32.179	205.108	0.187
Random	NoComp	HC	1	1.333	2	1	0.985	0.684	9.668	-41.683	62.577	216.447	1.111
Random	NoComp	HC	1	1.333	2	2	0.760	0.728	10.566	-24.900	54.330	250.114	1.485
Random	NoComp	HC	1	1.333	1	3	1.869	0.603	11.432	-90.766	49.732	241.803	1.141
Random	NoComp	HC	1	1.333	2	4	0.778	0.483	10.629	2.647	34.913	367.210	1.768
Rarity	Comp	C	1	2.000	4	1	0.379	0.414	0.897	27.670	1.033	2.374	0.027
Rarity	Comp	C	1	2.000	4	2	0.813	0.386	0.757	-9.484	0.591	1.584	0.107
Rarity	Comp	C	1	2.000	4	3	0.967	0.372	0.918	-7.785	0.659	2.270	0.045
Rarity	Comp	C	1	2.000	4	4	0.231	0.372	0.946	-4.100	1.029	2.766	0.041
Rarity	Comp	PC	1	2.000	4	1	0.862	1.122	3.000	-31.599	1.480	2.109	0.034
Rarity	Comp	PC	1	2.000	4	2	0.803	1.255	3.197	-32.156	0.938	2.437	-0.005
Rarity	Comp	PC	1	2.000	4	3	1.164	0.796	2.734	-20.467	1.283	2.929	0.006
Rarity	Comp	PC	1	2.000	4	4	0.806	1.178	2.447	1.579	1.135	1.617	0.044
Rarity	Comp	PCH	1	2.000	4	1	1.040	1.002	10.600	-0.282	0.636	2.782	0.000
Rarity	Comp	PCH	1	2.000	4	2	1.290	1.178	10.354	-57.262	0.514	3.864	-0.011
Rarity	Comp	PCH	1	2.000	4	3	1.104	0.778	9.836	5.457	0.897	3.600	0.036
Rarity	Comp	PCH	1	2.000	4	4	1.024	1.157	11.111	-62.060	0.444	4.495	0.006

Rarity	NoComp	C	1	0.667	2	1	0.923	0.697	3.447	8.977	51.853	254.335	8.492
Rarity	NoComp	C	1	0.667	1	2	0.897	0.778	3.064	3.031	111.000	75.085	1.656
Rarity	NoComp	C	1	0.667	1	3	0.723	0.747	3.509	8.085	102.675	83.901	1.848
Rarity	NoComp	C	1	0.667	1	4	0.897	0.935	3.892	-112.971	97.545	82.815	1.475
Rarity	NoComp	PC	1	1.333	1	1	0.735	0.709	2.907	29.258	61.463	232.306	9.032
Rarity	NoComp	PC	1	1.333	2	2	0.617	0.722	2.574	-34.644	90.401	98.800	1.579
Rarity	NoComp	PC	1	1.333	2	3	0.904	0.747	3.064	21.677	46.721	282.808	9.205
Rarity	NoComp	PC	1	1.333	2	4	0.673	0.791	5.619	3.878	89.868	62.273	1.443
Rarity	NoComp	PCH	1	2.000	1	1	0.810	0.684	11.075	-13.062	44.231	449.084	8.909
Rarity	NoComp	PCH	1	2.000	1	2	1.161	0.515	10.729	-62.543	38.766	334.588	1.516
Rarity	NoComp	PCH	1	2.000	2	3	1.034	0.785	11.100	-14.187	62.356	246.033	1.572
Rarity	NoComp	PCH	1	2.000	2	4	0.659	0.665	10.623	-31.519	34.330	364.686	1.372