# Supplementary Material

Table S1 Tukey *post hoc* results with habitat as fixed factor for variables organic matter content and silt content. (\*\*\* = P<0.001, \*\* = P<0.01, \* = P<0.05, NS = Not significant.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Groups** | **diff** | **lwr** | **upr** | **p adj** |
| **Water Content** |
| **Rockpool – Lower Mudflat** | 7.577361 | 2.457237 | 12.697485 | \*\* |
| **Upper Mudflat – Lower Mudflat** | -2.531111 | -7.498361 | 2.436139 | NS |
| **Upper Mudflat – Rockpool**  | -10.108472 | -15.228596 | -4.988348 | \*\*\* |
| **Organic Matter Content**  |
| **Rockpool – Lower Mudflat** | 1.4420301 | 0.4453728 | 2.4386873 | \*\* |
| **Upper Mudflat – Lower Mudflat** | 0.6208507 | -0.3460488 | 1.5877503 | NS |
| **Upper Mudflat – Rockpool**  | -0.8211793 | -1.8178366 | 0.1754779 | NS |
| **Median Grain Size** |
| **Rockpool – Lower Mudflat** | -7.651111 | -8.340508 | -6.961714 | \*\*\* |
| **Upper Mudflat – Lower Mudflat** | -3.288889 | -3.978286 | -2.599492 | \*\*\* |
| **Upper Mudflat – Rockpool**  | 4.362222 | 3.672825 | 5.051619 | \*\*\* |

Table S2 Tukey *post hoc* results with habitat as fixed factor for variables species richness and numeric abundance. (\*\*\* = P<0.001, \*\* = P<0.01, \* = P<0.05, NS = Not significant.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Groups** | **diff** | **lwr** | **upr** | **p adj** |
| **Species Richness**  |
| **Rockpool – Lower Mudflat** | -1.444444 | -2.921425 | 0.0325362 | NS |
| **Upper Mudflat – Lower Mudflat** | -3.222222 | -4.699203 | -1.7452416 | \*\*\* |
| **Upper Mudflat – Rockpool**  | -1.777778 | -3.254758 | -0.3007971 | \* |
| **Numeric Abundance**  |
| **Rockpool – Lower Mudflat** | -3.774679 | -6.752948 | -0.7964108 | \* |
| **Upper Mudflat – Lower Mudflat** | -4.446980 | -7.425249 | -1.4687119 | \*\* |
| **Upper Mudflat – Rockpool**  | -0.672301 | -3.650569 | 2.3059674 | NS |

Table S3 SIMPER results between habitat faunal assemblages.

|  |
| --- |
| **Artificial Rockpool and Lower Mudflat** |
| **Taxa** | **Artificial Rockpool****Av. Abund** | **Lower Mudflat Av. Abund** | **Average Dissimilarity** | **Contribution %** | **Cumulative****%** |
| ***Streblospio* *shrubsolii*** | 2.08 | 6.73 | 13.98 | 30.82 | 30.82 |
| ***Cyathura carinata*** | 0.16 | 2.39 | 6.09 | 13.43 | 44.24 |
| ***Tubificoides* sp.** | 1.57 | 3.56 | 5.97 | 13.15 | 57.39 |
| ***Peringia ulvae*** | 4.14 | 3.93 | 5.69 | 12.55 | 69.94 |
| ***Hediste diversicolor*** | 3.71 | 4.15 | 5.29 | 11.66 | 81.59 |
| ***Capitella capitata*** | 0.00 | 1.18 | 3.13 | 6.89 | 88.48 |
| ***Scrobicularia plana*** | 0.49 | 1.12 | 2.55 | 5.63 | 94.11 |
| **Vertipool and Upper Mudflat** |
| **Taxa** | **Vertipool****Av. Abund.** | **Upper Mudflat Av. Abund.** | **Average Dissimilarity** | **Contribution %** | **Cumulative****%** |
| ***Hediste diversicolor*** | 3.71 | 0.58 | 15.06 | 25.41 | 25.41 |
| ***Peringia ulvae*** | 4.14 | 5.47 | 13.25 | 22.35 | 47.76 |
| ***Streblospio* *shrubsolii*** | 2.08 | 0.00 | 8.34 | 14.06 | 61.82 |
| ***Tubificoides* sp.** | 1.57 | 0.11 | 7.08 | 11.94 | 73.76 |
| **Dolichopodidaesp.** | 0.19 | 1.15 | 5.20 | 8.78 | 82.54 |
| ***Scrobicularia plana*** | 0.49 | 1.07 | 4.08 | 6.88 | 89.42 |
| ***Carcinus maenas*** | 0.33 | 0.11 | 1.70 | 2.87 | 92.29 |
| **Lower and Upper Mudflat** |
| **Taxa** | **Lower Mudflat****Av. Abund** | **Upper Mudflat Av. Abund** | **Average Dissimilarity** | **Contribution %** | **Cumulative****%** |
| ***Streblospio* *shrubsolii*** | 6.73 | 0.00 | 21.06 | 30.48 | 30.48 |
| ***Hediste diversicolor*** | 4.15 | 0.58 | 12.40 | 17.94 | 48.43 |
| ***Tubificoides* sp.** | 3.56 | 0.11 | 10.81 | 15.64 | 64.07 |
| ***Peringia ulvae*** | 3.93 | 5.47 | 7.45 | 10.78 | 74.85 |
| ***Cyathura carinata*** | 2.39 | 0.11 | 7.14 | 10.33 | 85.18 |
| **Dolichopodidae sp.** | 0.00 | 1.15 | 3.53 | 5.11 | 90.29 |