

**Miguel G. Matias, A.J. Underwood, D.F. Hochuli and R.A. Coleman. Year. Independent effects of patch-size and structural complexity on diversity of benthic macro-invertebrates. Ecology VOL: pp-pp.**

Appendix B – Analyses of abundance and diversity of molluscs in patches of different size and structural complexity are available in

ESA’s Electronic Data Archive

Table B1. Analyses of abundance and diversity of molluscs in patches of different size and structural complexity: (a) number of individuals (b) number of species per unit and (c) number of species per patch. *Type* is fixed; *Patch-size* is fixed; *Location* is random.  $n = 3$ . SNK tests on differences among means at  $P < 0.05$ . Mean values of analysis (a) and (b) are in Fig. 2a, b. Levels of significance for this and subsequent tables: \* =  $P < 0.05$ , \*\* =  $P < 0.01$ , \*\*\* =  $P < 0.001$ . Numbers of individuals were transformed by  $\text{Sqrt}(X+1)$  (Cochran’s test,  $P < 0.005$ ).

| Source         | (a) |      |                  |          | (b)   |                   |          | (c)   |                   |          |
|----------------|-----|------|------------------|----------|-------|-------------------|----------|-------|-------------------|----------|
|                | df  | MS   | <i>F</i>         | <i>P</i> | MS    | <i>F</i>          | <i>P</i> | MS    | <i>F</i>          | <i>P</i> |
| Location = L   | 1   | 20.9 | 5.9 <sup>a</sup> | *        | 6.9   | 0.9 <sup>b</sup>  | NS       | 0.3   | 0.0 <sup>b</sup>  | NS       |
| Type = T       | 2   | 25.2 | 3.7              | NS       | 90.3  | 11.6 <sup>b</sup> | **       | 386.7 | 12.1 <sup>b</sup> | ***      |
| Patch-size = P | 2   | 35.4 | 5.9 <sup>a</sup> | NS       | 136.8 | 17.5 <sup>b</sup> | ***      | 281.2 | 13.2 <sup>b</sup> | ***      |
| L x T          | 4   | 6.9  | 1.9 <sup>a</sup> | NS       | 8.6   |                   |          | 32.0  |                   |          |
| L x P          | 2   | 6.0  | 1.7 <sup>a</sup> | NS       | 2.7   |                   |          | 24.1  |                   |          |

|           |    |     |                  |    |     |                  |    |      |                  |    |
|-----------|----|-----|------------------|----|-----|------------------|----|------|------------------|----|
| T x P     | 2  | 4.4 | 1.2 <sup>a</sup> | NS | 7.3 | 0.9 <sup>b</sup> | NS | 14.9 | 0.7 <sup>b</sup> | NS |
| L x T x P | 4  | 1.1 |                  |    | 4.4 |                  |    | 30.5 |                  |    |
| Residual  | 36 | 3.8 |                  |    | 8.4 |                  |    | 21.2 |                  |    |

<sup>a</sup>Tested against the residual Pooled L x T x P + Residual; <sup>b</sup>Tested against the residual Pooled L x T + L x P + L x T x P + Residual;