|  | 1 year | | | | | | | 2 years | | | | | | | 3 years | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| group | Variables | df | Sum of squares | R² | F | p-value | Variables | | df | Sum of squares | R² | F | p-value | Variables | | df | Sum of squares | R² | F | p-value |
| Understory macroalgae | Treatment | 1 | 84.45 | 0.00 | 0.49 | 0.59 | Treatment | | 1 | 134.20 | 0.00 | 0.99 | 0.47 | **Treatment** | | 1 | 562.66 | 0.01 | 4.01 | **0.01** |
| Time period | 2 | -362.81 | -0.02 | -1.06 | 0.97 | Time period | | 2 | 108.58 | 0.00 | 0.40 | 0.66 | **Time period** | | 2 | 971.49 | 0.02 | 3.46 | **0.01** |
| Treatment × time period | 2 | 220.93 | 0.01 | 0.65 | 0.64 | Treatment × time period | | 2 | 424.51 | 0.01 | 1.56 | 0.22 | Treatment × time period | | 2 | 513.92 | 0.01 | 1.83 | 0.13 |
| Residual | 112 | 19,133.68 | 1.00 |  |  | Residual | | 208 | 28,220.88 | 0.98 |  |  | Residual | | 294 | 41,265.28 | 0.95 |  |  |
| Total | 117 | 19,076.25 | 1.00 |  |  | Total | | 213 | 28,888.18 | 1.00 |  |  | Total | | 299 | 43,313.35 | 1.00 |  |  |
| Sessile invertebrates | Treatment | 1 | 5.48 | 0.02 | 1.95 | 0.06 | **Treatment** | | 1 | 11.95 | 0.02 | 4.36 | **<0.001** | **Treatment** | | 1 | 17.45 | 0.02 | 6.67 | **<0.001** |
| **Time period** | 2 | 35.43 | 0.10 | 6.30 | **<0.001** | **Time period** | | 2 | 58.56 | 0.09 | 10.67 | **<0.001** | **Time period** | | 2 | 60.47 | 0.07 | 11.56 | **<0.001** |
| **Treatment × time period** | 2 | 9.36 | 0.03 | 1.66 | **0.05** | **Treatment × time period** | | 2 | 13.16 | 0.02 | 2.40 | **<0.001** | **Treatment × time period** | | 2 | 17.14 | 0.02 | 3.27 | **<0.001** |
| Residual | 112 | 315.09 | 0.86 |  |  | Residual | | 208 | 570.60 | 0.87 |  |  | Residual | | 294 | 769.26 | 0.89 |  |  |
| Total | 117 | 365.36 | 1.00 |  |  | Total | | 213 | 654.27 | 1.00 |  |  | Total | | 299 | 864.32 | 1.00 |  |  |

|  | 1 year | | | | | | | 2 years | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| group | Variables | df | Sum of squares | R² | F | p-value | Variables | | df | Sum of squares | R² | F | p-value |
| Understory macroalgae | Treatment | 1 | 84.45 | 0.00 | 0.49 | 0.59 | Treatment | | 1 | 134.20 | 0.00 | 0.99 | 0.47 |
| Time period | 2 | -362.81 | -0.02 | -1.06 | 0.97 | Time period | | 2 | 108.58 | 0.00 | 0.40 | 0.66 |
| Treatment × time period | 2 | 220.93 | 0.01 | 0.65 | 0.64 | Treatment × time period | | 2 | 424.51 | 0.01 | 1.56 | 0.22 |
| Residual | 112 | 19,133.68 | 1.00 |  |  | Residual | | 208 | 28,220.88 | 0.98 |  |  |
| Total | 117 | 19,076.25 | 1.00 |  |  | Total | | 213 | 28,888.18 | 1.00 |  |  |
| Sessile invertebrates | Treatment | 1 | 5.48 | 0.02 | 1.95 | 0.06 | **Treatment** | | 1 | 11.95 | 0.02 | 4.36 | **<0.001** |
| **Time period** | 2 | 35.43 | 0.10 | 6.30 | **<0.001** | **Time period** | | 2 | 58.56 | 0.09 | 10.67 | **<0.001** |
| **Treatment × time period** | 2 | 9.36 | 0.03 | 1.66 | **0.05** | **Treatment × time period** | | 2 | 13.16 | 0.02 | 2.40 | **<0.001** |
| Residual | 112 | 315.09 | 0.86 |  |  | Residual | | 208 | 570.60 | 0.87 |  |  |
| Total | 117 | 365.36 | 1.00 |  |  | Total | | 213 | 654.27 | 1.00 |  |  |

|  | 3 years | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| group | Variables | df | Sum of squares | R² | F | p-value |
| Understory macroalgae | **Treatment** | 1 | 562.66 | 0.01 | 4.01 | **0.01** |
| **Time period** | 2 | 971.49 | 0.02 | 3.46 | **0.01** |
| Treatment × time period | 2 | 513.92 | 0.01 | 1.83 | 0.13 |
| Residual | 294 | 41,265.28 | 0.95 |  |  |
| Total | 299 | 43,313.35 | 1.00 |  |  |
| Sessile invertebrates | **Treatment** | 1 | 17.45 | 0.02 | 6.67 | **<0.001** |
| **Time period** | 2 | 60.47 | 0.07 | 11.56 | **<0.001** |
| **Treatment × time period** | 2 | 17.14 | 0.02 | 3.27 | **<0.001** |
| Residual | 294 | 769.26 | 0.89 |  |  |
| Total | 299 | 864.32 | 1.00 |  |  |