

S3 Table. Parameters of the fitted regression models.

| Terms | Estimate | SE | z-statistic | p-value |
|---|----------------------|----------------------|-------------|---------|
| Model 1 (GLM) | $pseudoR^2 = 0.38$ | | | |
| (Intercept) | -2.7 | 0.15 | -18.23 | < 0.001 |
| Ptros | 4.7 | 0.28 | 16.58 | < 0.001 |
| Set _(BL) | 0.2 | 0.26 | 0.62 | 0.537 |
| Set _(BH) | 2.2 | 0.19 | 11.30 | < 0.001 |
| Ptros:Set _(BL) | -0.5 | 0.45 | -1.03 | 0.302 |
| Ptros:Set _(BH) | -1.4 | 0.43 | -3.38 | 0.001 |
| Model 2 (GLMM) | $pseudoR_m^2 = 0.57$ | $pseudoR_c^2 = 0.64$ | | |
| (Intercept) | -4.2 | 0.38 | -10.89 | < 0.001 |
| Ptros | 4.7 | 0.82 | 5.80 | < 0.001 |
| Set _(BL) | 0.3 | 0.75 | 0.40 | 0.688 |
| Set _(BH) | 3.5 | 0.57 | 6.18 | < 0.001 |
| Species _(M.trossulus) | 4.2 | 0.45 | 9.34 | < 0.001 |
| Ptros:Set _(BL) | -1.9 | 1.51 | -1.24 | 0.214 |
| Ptros:Set _(BH) | -1.8 | 1.29 | -1.36 | 0.174 |
| Ptros:Species _(M.trossulus) | -2.5 | 0.83 | -3.02 | 0.003 |
| Set _(BL) :Species _(M.trossulus) | -0.5 | 0.77 | -0.61 | 0.54 |
| Set _(BH) :Species _(M.trossulus) | -3 | 0.62 | -4.87 | < 0.001 |
| Ptros:Set _(BL) :Species _(M.trossulus) | 2.2 | 1.46 | 1.52 | 0.129 |
| Ptros:Set _(BH) :Species _(M.trossulus) | 2.5 | 1.25 | 1.96 | 0.05 |
| sd(Intercept) | 0.8 | | | |
| Model 3 (GLMM) | $pseudoR_m^2 = 0.4$ | $pseudoR_c^2 = 0.42$ | | |
| (Intercept) | 3.8 | 0.28 | 13.99 | < 0.001 |
| Morph _(T) | -3.8 | 0.41 | -9.12 | < 0.001 |
| Ptros | -5.2 | 0.55 | -9.57 | < 0.001 |
| Set _(BL) | -0.4 | 0.47 | -0.88 | 0.377 |
| Set _(BH) | -0.6 | 0.47 | -1.21 | 0.226 |
| Morph _(T) :Ptros | 8.1 | 0.78 | 10.40 | < 0.001 |
| Morph _(T) :Set _(BL) | 0.8 | 0.73 | 1.09 | 0.276 |
| Morph _(T) :Set _(BH) | -1.6 | 0.58 | -2.71 | 0.007 |
| Ptros:Set _(BL) | 0.8 | 0.9 | 0.91 | 0.361 |
| Ptros:Set _(BH) | 0.4 | 1.02 | 0.36 | 0.72 |
| Morph _(T) :Ptros:Set _(BL) | -0.3 | 1.37 | -0.21 | 0.83 |
| Morph _(T) :Ptros:Set _(BH) | 1.4 | 1.2 | 1.16 | 0.244 |
| sd_(Intercept) | 0.3 | | | |

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| Model 4 (GLM) | $pseudoR^2 = 0.42$ | | | |
| (Intercept) | -2.4 | 0.11 | -21.34 | < 0.001 |
| PT | 5.4 | 0.26 | 20.74 | < 0.001 |
| Set _(BH) | -1.5 | 0.32 | -4.55 | < 0.001 |
| Set _(GOM) | 0.1 | 0.22 | 0.69 | 0.492 |
| Set _(BALT) | 1.8 | 0.16 | 11.01 | < 0.001 |
| Set _(NORW) | 1.9 | 0.22 | 8.91 | < 0.001 |
| PT:Set _(BH) | -0.4 | 0.5 | -0.87 | 0.386 |
| PT:Set _(GOM) | 0.8 | 0.74 | 1.04 | 0.299 |
| PT:Set _(BALT) | 6.1 | 1.22 | 5.05 | < 0.001 |
| PT:Set _(NORW) | -1.8 | 0.62 | -2.81 | 0.005 |
| Model 5 (GLMM) | $pseudoR_m^2 = 0.57$ | $pseudoR_c^2 = 0.66$ | | |
| (Intercept) | -4.2 | 0.36 | -11.64 | < 0.001 |
| Ptros | 4.2 | 0.74 | 5.70 | < 0.001 |
| Set _(BH) | 3.6 | 0.62 | 5.77 | < 0.001 |
| Set _(GOM) | 0.4 | 0.63 | 0.55 | 0.579 |
| Set _(BALT) | -2.8 | 1.7 | -1.63 | 0.102 |
| Set _(NORW) | 1.3 | 1.05 | 1.27 | 0.205 |
| Species _(M.trossulus) | 4.1 | 0.37 | 11.04 | < 0.001 |
| Ptros:Set _(BH) | -1.1 | 1.37 | -0.82 | 0.414 |
| Ptros:Set _(GOM) | -1.7 | 1.76 | -0.98 | 0.326 |
| Ptros:Set _(BALT) | 1.3 | 2.56 | 0.51 | 0.612 |
| Ptros:Set _(NORW) | -5.7 | 2.04 | -2.79 | 0.005 |
| Ptros:Species _(M.trossulus) | -1.7 | 0.68 | -2.45 | 0.014 |
| Set _(BH) :Species _(M.trossulus) | -2.9 | 0.57 | -5.16 | < 0.001 |
| Set _(GOM) :Species _(M.trossulus) | 0.5 | 0.98 | 0.52 | 0.605 |
| Set _(BALT) :Species _(M.trossulus) | -1.4 | 1.64 | -0.85 | 0.397 |
| Set _(NORW) :Species _(M.trossulus) | -2.3 | 1.28 | -1.82 | 0.069 |
| Ptros:Set _(BH) :Species _(M.trossulus) | 1.6 | 1.17 | 1.41 | 0.159 |
| Ptros:Set _(GOM) :Species _(M.trossulus) | -2.1 | 2.02 | -1.04 | 0.296 |
| Ptros:Set _(BALT) :Species _(M.trossulus) | -0.4 | 2.41 | -0.17 | 0.863 |
| Ptros:Set _(NORW) :Species _(M.trossulus) | 3.5 | 2.03 | 1.73 | 0.083 |
| sd(Intercept) | 0.9 | | | |

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| Model 6 (GLMM) | $pseudoR_m^2 = 0.5$ | $pseudoR_c^2 = 0.51$ | | |
| (Intercept) | 3.7 | 0.21 | 17.23 | < 0.001 |
| Morph _(T) | -3.5 | 0.33 | -10.50 | < 0.001 |
| Ptros | -4.9 | 0.41 | -12.00 | < 0.001 |
| Set _(BH) | -0.4 | 0.43 | -1.00 | 0.318 |
| Set _(GOM) | 1 | 0.58 | 1.78 | 0.074 |
| Set _(BALT) | -0.9 | 0.41 | -2.28 | 0.023 |
| Set _(NORW) | -0.6 | 0.61 | -1.00 | 0.315 |
| Morph _(T) :Ptros | 8.1 | 0.63 | 12.90 | < 0.001 |
| Morph _(T) :Set _(BH) | -1.8 | 0.53 | -3.43 | 0.001 |
| Morph _(T) :Set _(GOM) | -1.8 | 0.84 | -2.18 | 0.029 |
| Morph _(T) :Set _(BALT) | 0.4 | 1.54 | 0.23 | 0.82 |
| Morph _(T) :Set _(NORW) | -1.1 | 1.17 | -0.95 | 0.343 |
| Ptros:Set _(BH) | 0.1 | 0.93 | 0.09 | 0.928 |
| Ptros:Set _(GOM) | -3.2 | 1.08 | -2.92 | 0.003 |
| Ptros:Set _(BALT) | -0.5 | 0.72 | -0.72 | 0.47 |
| Ptros:Set _(NORW) | 0 | 0.95 | -0.05 | 0.959 |
| Morph _(T) :Ptros:Set _(BH) | 1.4 | 1.1 | 1.27 | 0.204 |
| Morph _(T) :Ptros:Set _(GOM) | 4.8 | 1.88 | 2.57 | 0.01 |
| Morph _(T) :Ptros:Set _(BALT) | 1.2 | 2.2 | 0.55 | 0.579 |
| Morph _(T) :Ptros:Set _(NORW) | 3.6 | 1.94 | 1.86 | 0.063 |
| sd(Intercept) | 0.3 | | | |