

SUPPLEMENTARY TABLE 1. Specimens examined, habitat and measured values of parameters: M = marine species; F = freshwater species; L = land species; SUM = Shizuoka University; SHIN = Shinshu University; BPBM = Bishop Museum; SPMN = Network for Shizuoka Prefecture Museum of Natural History; UMUT = University Museum, University of Tokyo.

| Species | Repository | Habitat | model parameters | | | | | functional parameters | | | |
|--|------------|---------|------------------|-------|--------|-------|----------|-----------------------|-------|--|--|
| | | | W | T | D | A | Γ | 1/A | E | | |
| Orthogastropoda | | | | | | | | | | | |
| Vetigastropoda | | | | | | | | | | | |
| Haliotoidea | | | | | | | | | | | |
| Haliotidae | | | | | | | | | | | |
| <i>Haliotis gigantea</i> | SPMN | M | 16.815 | 0.696 | -0.184 | 1.136 | -0.138 | 0.203 | 0.809 | | |
| <i>Haliotis diversicolor aquatilis</i> | SUM | M | 11.907 | 0.449 | -0.241 | 1.102 | 0.088 | 0.332 | 0.792 | | |
| Pleurotomarioidea | | | | | | | | | | | |
| Pleurotomariidae | | | | | | | | | | | |
| <i>Perotrochus hirasei</i> | SPMN | M | 1.680 | 1.256 | 0.016 | 0.902 | 0.056 | 0.181 | 0.822 | | |
| <i>Perotrochus africanus westralis</i> | SPMN | M | 1.929 | 1.146 | 0.003 | 0.900 | -0.100 | 0.220 | 0.811 | | |
| Trocoidea | | | | | | | | | | | |
| Trochidae | | | | | | | | | | | |
| <i>Chlorostoma xanthostigma</i> | UMUT | M | 2.127 | 1.192 | -0.655 | 1.086 | -0.567 | 0.184 | 0.558 | | |
| <i>Chlorostoma xanthostigma</i> | UMUT | M | 1.893 | 1.308 | -0.231 | 1.102 | -0.166 | 0.193 | 0.783 | | |
| <i>Granata lyrata</i> | UMUT | M | 2.826 | 1.261 | -0.321 | 0.798 | 0.286 | 0.199 | 0.781 | | |
| <i>Euchelus atrata</i> | UMUT | M | 2.296 | 1.437 | -0.175 | 0.883 | -0.409 | 0.195 | 0.802 | | |
| <i>Cittarium pica</i> | UMUT | M | 2.142 | 1.417 | -0.248 | 0.965 | -0.206 | 0.221 | 0.782 | | |
| <i>Lischkeia alwiniae</i> | SPMN | M | 1.678 | 1.354 | -0.165 | 1.030 | -0.408 | 0.235 | 0.783 | | |
| <i>Ginebis argenteonitens form convexiuscula</i> | SPMN | M | 1.658 | 1.934 | -0.067 | 0.544 | -0.174 | 0.185 | 0.817 | | |
| <i>Trochus erythraeus</i> | SPMN | M | 1.611 | 1.434 | -0.160 | 1.103 | -0.380 | 0.222 | 0.789 | | |
| <i>Trochus maculatus</i> | UMUT | M | 1.441 | 1.917 | -0.274 | 1.183 | -0.131 | 0.183 | 0.755 | | |
| <i>Tectus conus</i> | SPMN | M | 1.465 | 2.092 | -0.151 | 1.067 | -0.279 | 0.179 | 0.800 | | |
| <i>Tectus triserialis</i> | SUM | M | 1.402 | 2.054 | 0.059 | 1.012 | -0.147 | 0.200 | 0.814 | | |
| <i>Tegula regina</i> | SPMN | M | 1.693 | 1.626 | 0.019 | 1.309 | 0.517 | 0.138 | 0.799 | | |
| <i>Bankivia fasciata</i> | UMUT | M | 1.425 | 4.146 | -0.078 | 0.420 | -0.112 | 0.147 | 0.810 | | |
| <i>Monodonta turbinata</i> | UMUT | M | 1.857 | 1.560 | -0.181 | 0.922 | -0.462 | 0.238 | 0.799 | | |
| <i>Fossarina petterdi</i> | UMUT | M | 4.377 | 0.962 | 0.059 | 0.733 | -0.630 | 0.167 | 0.809 | | |
| <i>Stomatia phymotis</i> | UMUT | M | 5.293 | 2.259 | -0.091 | 0.483 | -0.415 | 0.135 | 0.809 | | |
| <i>Calliostoma granulatum</i> | SPMN | M | 1.746 | 1.512 | -0.081 | 0.797 | -0.429 | 0.199 | 0.806 | | |
| <i>Umbonium giganteum</i> | UMUT | M | 1.910 | 0.960 | 0.172 | 0.778 | -0.192 | 0.184 | 0.809 | | |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | | | |
|-------------------------------|------------|---------|------------------|-------|--------|--------|----------|-----------------------|-------|--|--|
| | | | W | T | D | A | Γ | 1/A | E | | |
| Turbinoidea | | | | | | | | | | | |
| Turbinidae | | | | | | | | | | | |
| <i>Liotina peronii</i> | UMUT | M | 2.344 | 1.060 | -0.331 | 0.441 | -0.319 | 0.197 | 0.764 | | |
| <i>Cookia sulcata</i> | UMUT | M | 1.734 | 1.271 | -0.141 | 0.897 | 0.060 | 0.174 | 0.799 | | |
| <i>Astrea undosa</i> | SPMN | M | 1.878 | 1.413 | 0.082 | 1.041 | -0.483 | 0.174 | 0.808 | | |
| <i>Angaria delphinus</i> | UMUT | M | 2.494 | 0.998 | 0.047 | 0.535 | -0.291 | 0.211 | 0.809 | | |
| <i>Angaria delphinus</i> | SPMN | M | 2.388 | 0.679 | 0.087 | 0.303 | -0.201 | 0.161 | 0.817 | | |
| <i>Angaria neglecta</i> | UMUT | M | 2.344 | 0.998 | 0.002 | 0.656 | -0.466 | 0.164 | 0.809 | | |
| <i>Turbo cornutus</i> | SUM | M | 2.039 | 1.463 | -0.282 | 0.632 | -0.375 | 0.237 | 0.786 | | |
| <i>Turbo petholatus</i> | SPMN | M | 2.292 | 1.331 | -0.051 | 0.516 | -0.378 | 0.229 | 0.808 | | |
| <i>Astralium haematragum</i> | SUM | M | 1.542 | 1.899 | -0.013 | 1.070 | -0.244 | 0.193 | 0.807 | | |
| <i>Astralium haematragum</i> | SUM | M | 1.833 | 1.357 | 0.016 | 1.015 | -0.129 | 0.189 | 0.808 | | |
| <i>Guildfordia triumphans</i> | SUM | M | 2.102 | 0.888 | 0.157 | 0.684 | -0.182 | 0.181 | 0.809 | | |
| <i>Phasianella australis</i> | UMUT | M | 1.724 | 2.455 | -0.145 | 0.411 | -0.417 | 0.190 | 0.804 | | |
| <i>Phasianella australis</i> | SPMN | M | 1.689 | 2.805 | -0.041 | 0.274 | -0.030 | 0.153 | 0.809 | | |
| Neritimorpha | | | | | | | | | | | |
| Cyclonertimorpha | | | | | | | | | | | |
| Neritoidea | | | | | | | | | | | |
| Neritidae | | | | | | | | | | | |
| <i>Nerita albicilla</i> | SUM | M | 19.372 | 0.189 | -0.021 | -0.006 | -0.211 | 0.318 | 0.810 | | |
| <i>Nerita costata</i> | SPMN | M | 4.819 | 1.013 | -0.283 | 0.634 | -0.758 | 0.232 | 0.791 | | |
| <i>Nerita exuvia</i> | SPMN | M | 8.479 | 0.873 | -0.048 | 0.345 | -0.209 | 0.212 | 0.809 | | |
| <i>Nerita japonica</i> | UMUT | M | 3.513 | 1.044 | -0.064 | 0.696 | -0.543 | 0.160 | 0.808 | | |
| <i>Neritina cornucopia</i> | UMUT | M | 9.654 | 0.263 | -0.031 | 0.066 | -0.153 | 0.235 | 0.810 | | |
| Apogastropoda | | | | | | | | | | | |
| Caenogastropoda | | | | | | | | | | | |
| Architaenioglossa | | | | | | | | | | | |
| Ampullaroidea | | | | | | | | | | | |
| Ampullariidae | | | | | | | | | | | |
| <i>Lanistes olivaceus</i> | UMUT | F | 1.763 | 2.104 | -0.059 | 0.358 | 0.296 | 0.150 | 0.807 | | |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|---|------------|---------|------------------|----------|----------|----------|----------|-----------------------|----------|
| | | | <i>W</i> | <i>T</i> | <i>D</i> | Δ | Γ | $1/\Lambda$ | <i>E</i> |
| <i>Rissoa marginata</i> | UMUT | M | 1.714 | 2.597 | -0.118 | 0.547 | -0.208 | 0.194 | 0.810 |
| Pomatiopsidae | | | | | | | | | |
| <i>Oncomelania nosophora</i> | UMUT | F | 1.331 | 5.172 | 0.286 | 0.044 | -0.244 | 0.105 | 0.810 |
| Assimineidae | | | | | | | | | |
| <i>Assiminea grayana</i> | UMUT | M | 1.786 | 2.518 | -0.316 | 0.435 | 0.000 | 0.168 | 0.783 |
| Stromboidea | | | | | | | | | |
| Strombidae | | | | | | | | | |
| <i>Lambis chiragra</i> | SUM | M | 1.733 | 1.976 | -0.138 | 0.036 | -0.143 | 0.150 | 0.808 |
| <i>Lambis lambis</i> | UMUT | M | 3.888 | 1.860 | -0.421 | 0.026 | -0.928 | 0.169 | 0.749 |
| <i>Strombus aurisdianae</i> | UMUT | M | 1.641 | 1.741 | -0.217 | -0.018 | 0.195 | 0.152 | 0.789 |
| <i>Strombus dentatus</i> | UMUT | M | 1.564 | 2.686 | -0.197 | 0.189 | 0.159 | 0.144 | 0.799 |
| <i>Strombus pipus</i> | SPMN | M | 1.824 | 1.282 | 0.108 | 0.192 | -0.494 | 0.162 | 0.819 |
| <i>Strombus urceas</i> | SUM | M | 1.521 | 2.003 | 0.036 | 0.143 | 0.284 | 0.142 | 0.824 |
| <i>Strombus vomer</i> | SPMN | M | 1.572 | 2.054 | -0.100 | -0.106 | 0.363 | 0.142 | 0.807 |
| <i>Tibia fusus</i> | SPMN | M | 1.233 | 6.785 | -0.127 | 0.271 | -0.023 | 0.119 | 0.807 |
| <i>Tibia insulaechorab</i> | SUM | M | 1.313 | 4.348 | 0.075 | -0.127 | -0.258 | 0.131 | 0.809 |
| Seraphidae | | | | | | | | | |
| <i>Terebellum terebellum terebellum</i> | SPMN | M | 2.216 | 5.396 | -0.399 | -0.083 | 0.000 | 0.103 | 0.772 |
| <i>Hipponix conica</i> | UMUT | M | 46.615 | 0.285 | 0.099 | -0.177 | -0.448 | 0.147 | 0.810 |
| Aporrhaidae | | | | | | | | | |
| <i>Aporrhais pespelecani</i> | SPMN | M | 1.436 | 3.177 | -0.010 | -0.280 | -0.241 | 0.138 | 0.806 |
| <i>Aporrhais occidentalis</i> | UMUT | M | 1.416 | 3.622 | 0.004 | -0.248 | -0.173 | 0.133 | 0.807 |
| Struthiolariidae | | | | | | | | | |
| <i>Struthiolaria papulosa</i> | UMUT | M | 1.630 | 2.563 | -0.317 | 0.288 | -0.269 | 0.160 | 0.771 |
| Vanikoloidea | | | | | | | | | |
| Vanikoridae | | | | | | | | | |
| <i>Vanikoro acuta</i> | UMUT | M | 3.168 | 1.125 | -0.101 | 0.597 | -0.266 | 0.202 | 0.808 |
| Capuloidea | | | | | | | | | |
| Capulidae | | | | | | | | | |
| <i>Capulus ungaricus</i> | SPMN | M | 135.702 | 0.085 | 0.044 | 0.105 | -0.695 | 0.202 | 0.809 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|--------------------------------|------------|---------|------------------|-------|--------|--------|----------|-----------------------|-------|
| | | | W | T | D | A | Γ | 1/A | E |
| <i>Trichamathina nobilis</i> | UMUT | M | 12.868 | 0.212 | 0.159 | 0.129 | -0.458 | 0.154 | 0.810 |
| <i>Trichotropis bicarinata</i> | UMUT | M | 2.731 | 0.932 | -0.018 | 0.442 | -0.272 | 0.211 | 0.809 |
| Calyptraeoidea | | | | | | | | | |
| Calyptraeidae | | | | | | | | | |
| <i>Crepidula fornicata</i> | UMUT | M | 19.411 | 0.260 | -0.162 | 0.186 | -0.484 | 0.317 | 0.805 |
| Xenophoroidea | | | | | | | | | |
| Xenophoridae | | | | | | | | | |
| <i>Stellaria exutus</i> | SUM | M | 2.095 | 0.815 | 0.127 | 0.825 | -0.157 | 0.194 | 0.810 |
| <i>Stellaria solaris</i> | SPMN | M | 1.932 | 0.947 | 0.044 | 1.333 | 0.507 | 0.136 | 0.807 |
| <i>Xenophora pallidula</i> | UMUT | M | 1.693 | 1.122 | -0.040 | 1.232 | 0.165 | 0.183 | 0.812 |
| Cypraeoidea | | | | | | | | | |
| Cypraeidae | | | | | | | | | |
| <i>Cypraea mauritiana</i> | UMUT | M | 6.169 | 1.613 | -0.057 | 0.213 | -0.149 | 0.167 | 0.809 |
| <i>Cypraea tigris</i> | UMUT | M | 2.486 | 0.905 | -0.294 | 0.233 | -0.183 | 0.171 | 0.774 |
| Ovulidae | | | | | | | | | |
| <i>Volva volva volva</i> | UMUT | M | 1.215 | 3.080 | -0.336 | 0.026 | -0.109 | 0.146 | 0.734 |
| <i>Ovula ovum</i> | UMUT | M | 2.235 | 0.764 | -0.195 | -0.020 | 0.061 | 0.143 | 0.786 |
| Velutinoidea | | | | | | | | | |
| Triviidae | | | | | | | | | |
| <i>Erato voluta</i> | UMUT | M | 2.271 | 1.710 | -0.175 | 0.009 | -0.220 | 0.153 | 0.794 |
| Naticoidea | | | | | | | | | |
| Naticidae | | | | | | | | | |
| <i>Cryptonatica andoi</i> | UMUT | M | 2.679 | 1.160 | 0.046 | 0.525 | -0.240 | 0.220 | 0.809 |
| <i>Euspira fortunei</i> | SPMN | M | 1.929 | 1.682 | -0.079 | 0.596 | -0.179 | 0.209 | 0.808 |
| <i>Glossaulax bicolor</i> | UMUT | M | 3.493 | 0.869 | 0.044 | 0.713 | -0.485 | 0.177 | 0.809 |
| <i>Glossaulax didyma</i> | SUM | M | 3.317 | 1.047 | -0.099 | 0.812 | 0.123 | 0.248 | 0.807 |
| <i>Glossaulax vesicalis</i> | SPMN | M | 6.108 | 1.114 | -0.116 | 0.723 | -0.169 | 0.181 | 0.809 |
| <i>Lunatia lewisi</i> | SPMN | M | 2.529 | 0.993 | -0.096 | 0.665 | 0.047 | 0.198 | 0.814 |
| <i>Polinices catena</i> | UMUT | M | 2.247 | 1.312 | 0.081 | 0.534 | -0.596 | 0.163 | 0.809 |
| <i>Polinices mammilla</i> | SPMN | M | 4.291 | 1.497 | -0.095 | 0.413 | -0.237 | 0.169 | 0.809 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|-------------------------------------|------------|---------|------------------|-------|--------|-------|----------|-----------------------|-------|
| | | | W | T | D | A | Γ | 1/A | E |
| <i>Sinum javanicum</i> | UMUT | M | 6.912 | 0.979 | -0.235 | 0.792 | -0.193 | 0.191 | 0.808 |
| Risooidea | | | | | | | | | |
| Bithyniidae | | | | | | | | | |
| <i>Bithynia tentaculata</i> | UMUT | F | 1.967 | 2.010 | 0.036 | 0.410 | -0.375 | 0.188 | 0.809 |
| <i>Parafossarulus manchouricus</i> | UMUT | F | 1.521 | 2.704 | 0.053 | 0.690 | -0.461 | 0.171 | 0.809 |
| <i>Parafossarulus manchouricus</i> | UMUT | F | 1.582 | 3.144 | 0.031 | 0.734 | -0.185 | 0.152 | 0.809 |
| Truncatellidae | | | | | | | | | |
| <i>Truncatella marginata</i> | UMUT | L | 1.216 | 6.935 | -0.016 | 0.349 | 0.162 | 0.118 | 0.809 |
| Tonnoidea | | | | | | | | | |
| Bursidae | | | | | | | | | |
| <i>Bufonaria rana</i> | UMUT | M | 1.812 | 1.625 | -0.311 | 0.228 | -0.042 | 0.154 | 0.773 |
| <i>Bursa elegans</i> | SUM | M | 1.643 | 1.942 | -0.106 | 0.220 | -0.378 | 0.168 | 0.815 |
| Cassidae | | | | | | | | | |
| <i>Casmaria ponderosa ponderosa</i> | SPMN | M | 2.018 | 1.945 | 0.031 | 0.221 | -0.608 | 0.176 | 0.809 |
| <i>Casmaria ponderosa ponderosa</i> | SPMN | M | 1.958 | 1.768 | -0.398 | 0.102 | -0.259 | 0.172 | 0.739 |
| <i>Cassis nana</i> | SPMN | M | 2.636 | 0.484 | 0.036 | 0.119 | -0.843 | 0.167 | 0.806 |
| <i>Cassis vibex</i> | UMUT | M | 1.989 | 1.838 | -0.369 | 0.181 | -0.570 | 0.173 | 0.738 |
| <i>Cypraeocassis coarctata</i> | SPMN | M | 1.947 | 0.979 | -0.228 | 0.095 | -0.848 | 0.185 | 0.773 |
| <i>Cypraeocassis rufa</i> | SPMN | M | 1.461 | 1.899 | -0.388 | 0.118 | -0.596 | 0.151 | 0.696 |
| <i>Galeodea rugosa</i> | SPMN | M | 2.021 | 1.177 | 0.076 | 0.159 | -0.481 | 0.166 | 0.816 |
| <i>Galeodea rugosa</i> | SPMN | M | 1.954 | 1.486 | 0.009 | 0.152 | -0.548 | 0.171 | 0.809 |
| <i>Phalium flammiferum</i> | SUM | M | 1.831 | 1.319 | -0.309 | 0.247 | -0.797 | 0.182 | 0.738 |
| <i>Semicassis bisulcata pila</i> | SUM | M | 1.889 | 1.576 | -0.454 | 0.095 | -0.250 | 0.153 | 0.716 |
| <i>Semicassis pyrum</i> | SPMN | M | 2.094 | 1.122 | -0.162 | 0.246 | -0.702 | 0.198 | 0.796 |
| Ficidae | | | | | | | | | |
| <i>Ficus ventricosa</i> | UMUT | M | 3.107 | 1.057 | -0.330 | 0.030 | -0.238 | 0.168 | 0.764 |
| <i>Ficus subintermedia</i> | SUM | M | 1.989 | 1.267 | -0.016 | 0.096 | 0.015 | 0.163 | 0.819 |
| Tonnidae | | | | | | | | | |
| <i>Eudolium lineatum</i> | SPMN | M | 1.955 | 1.663 | 0.166 | 0.311 | -0.490 | 0.169 | 0.810 |
| <i>Malea pomum</i> | SPMN | M | 2.120 | 0.525 | 0.087 | 0.145 | -0.316 | 0.174 | 0.809 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|----------------------------------|------------|---------|------------------|----------|----------|----------|----------|-----------------------|----------|
| | | | <i>W</i> | <i>T</i> | <i>D</i> | <i>A</i> | Γ | $1/\Lambda$ | <i>E</i> |
| <i>Tonna perdix</i> | UMUT | M | 2.694 | 1.505 | -0.314 | 0.435 | -0.342 | 0.234 | 0.785 |
| <i>Tonna luteostoma</i> | SUM | M | 2.251 | 1.134 | -0.371 | 0.347 | -0.457 | 0.191 | 0.745 |
| Ranellidae | | | | | | | | | |
| <i>Biplex perca</i> | SPMN | M | 1.485 | 3.710 | -0.083 | 0.052 | -0.827 | 0.142 | 0.789 |
| <i>Charonia lampas macilenta</i> | UMUT | M | 1.520 | 2.532 | -0.077 | 0.173 | -0.933 | 0.168 | 0.790 |
| <i>Charonia variegate</i> | SPMN | M | 1.522 | 3.165 | -0.362 | 0.136 | -0.515 | 0.146 | 0.731 |
| <i>Cymatium gutturnium</i> | SPMN | M | 1.849 | 1.334 | 0.161 | 0.047 | -1.400 | 0.140 | 0.769 |
| <i>Cymatium parthenopeum</i> | SUM | M | 1.629 | 2.164 | -0.125 | 0.241 | -1.304 | 0.171 | 0.760 |
| <i>Gelagna succincta</i> | UMUT | M | 1.729 | 1.813 | -0.246 | 0.395 | -0.305 | 0.178 | 0.790 |
| <i>Linatella cingulata</i> | SPMN | M | 1.885 | 1.548 | 0.151 | 0.076 | -0.481 | 0.150 | 0.810 |
| Personidae | | | | | | | | | |
| <i>Distorsio anus</i> | UMUT | M | 1.391 | 1.852 | -0.327 | -0.002 | -0.873 | 0.153 | 0.688 |
| Ptenoglossa | | | | | | | | | |
| Triphoroidea | | | | | | | | | |
| Cerithiopsidae | | | | | | | | | |
| <i>Cerithiopsis emersonii</i> | UMUT | M | 1.102 | 7.802 | -0.320 | 0.165 | -0.971 | 0.119 | 0.648 |
| Triphoridae | | | | | | | | | |
| <i>Marshallora adversa</i> | UMUT | M | 1.112 | 8.228 | -0.067 | 0.706 | -0.505 | 0.125 | 0.819 |
| Janthinoidea | | | | | | | | | |
| Janthinidae | | | | | | | | | |
| <i>Janthina janthina</i> | UMUT | M | 3.082 | 1.183 | -0.009 | 0.588 | -0.041 | 0.233 | 0.808 |
| <i>Janthina janthina</i> | SPMN | M | 2.922 | 1.107 | 0.084 | 0.587 | -0.282 | 0.159 | 0.809 |
| <i>Janthina umbilicata</i> | UMUT | M | 2.898 | 1.432 | -0.203 | 0.203 | -0.443 | 0.213 | 0.797 |
| Epitonidae | | | | | | | | | |
| <i>Cirsotrema varicosum</i> | SPMN | M | 1.343 | 4.316 | -0.029 | 0.367 | -0.427 | 0.145 | 0.808 |
| <i>Epitonium scalare</i> | UMUT | M | 1.624 | 2.333 | 0.036 | 0.228 | -0.379 | 0.158 | 0.809 |
| <i>Gyroscala lamellosa</i> | UMUT | M | 1.463 | 3.205 | -0.087 | 0.268 | -0.227 | 0.156 | 0.808 |
| Eulimoidea | | | | | | | | | |
| Eulimidae | | | | | | | | | |
| <i>Melanella major</i> | UMUT | M | 1.213 | 5.688 | -0.083 | 0.207 | -0.255 | 0.134 | 0.818 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|----------------------------------|------------|---------|------------------|-------|--------|--------|----------|-----------------------|-------|
| | | | W | T | D | A | Γ | 1/A | E |
| <i>Scalenostoma carinata</i> | UMUT | M | 1.168 | 5.564 | 0.114 | -0.323 | -0.018 | 0.143 | 0.810 |
| Neogastropoda | | | | | | | | | |
| Muricoidea | | | | | | | | | |
| Muricidae | | | | | | | | | |
| <i>Acanthina monodon</i> | UMUT | M | 2.857 | 1.167 | -0.056 | 0.359 | -0.564 | 0.187 | 0.808 |
| <i>Bolinus cornutus</i> | SPMN | M | 2.564 | 0.902 | -0.091 | 0.232 | -0.712 | 0.215 | 0.803 |
| <i>Ceratostoma burnetti</i> | UMUT | M | 1.914 | 1.595 | 0.043 | 0.317 | -0.258 | 0.170 | 0.809 |
| <i>Chicoreus banksii</i> | SPMN | M | 1.580 | 2.233 | 0.337 | 0.110 | -0.436 | 0.125 | 0.810 |
| <i>Chicoreus cornucervi</i> | SPMN | M | 1.775 | 1.810 | 0.241 | 0.204 | -0.822 | 0.158 | 0.809 |
| <i>Chicoreus torrefactus</i> | SPMN | M | 1.542 | 2.239 | 0.111 | 0.220 | -0.581 | 0.157 | 0.809 |
| <i>Concholepas concholepas</i> | UMUT | M | 9.393 | 0.591 | -0.136 | -0.061 | -0.767 | 0.245 | 0.796 |
| <i>Coralliophila neritoides</i> | UMUT | M | 3.033 | 1.146 | -0.047 | 0.537 | -0.482 | 0.156 | 0.808 |
| <i>Cronia margariticola</i> | UMUT | M | 1.552 | 2.128 | 0.280 | 0.253 | -0.863 | 0.149 | 0.809 |
| <i>Drupa rutilus rutilus</i> | SPMN | M | 1.895 | 1.415 | -0.091 | 0.456 | -1.357 | 0.171 | 0.758 |
| <i>Haustellum haustellum</i> | SPMN | M | 2.318 | 1.169 | 0.170 | -0.270 | -0.331 | 0.128 | 0.810 |
| <i>Homalocantha scorpio</i> | SPMN | M | 2.131 | 2.297 | 0.090 | -0.026 | -0.721 | 0.143 | 0.808 |
| <i>Mancinella echinata</i> | SPMN | M | 1.805 | 1.740 | 0.001 | 0.431 | -0.631 | 0.198 | 0.808 |
| <i>Morula granulata</i> | UMUT | M | 1.930 | 1.543 | -0.087 | 0.490 | -0.990 | 0.193 | 0.784 |
| <i>Murex pecten pecten</i> | SPMN | M | 1.838 | 1.944 | 0.379 | 0.211 | -0.738 | 0.112 | 0.810 |
| <i>Nassa francolina</i> | UMUT | M | 2.295 | 2.222 | -0.115 | 0.139 | -0.218 | 0.163 | 0.806 |
| <i>Neothais orbita</i> | SPMN | M | 2.347 | 1.580 | -0.139 | 0.350 | -0.331 | 0.209 | 0.805 |
| <i>Ocenebra interfoissa</i> | UMUT | M | 1.722 | 2.791 | -0.334 | 0.256 | -0.799 | 0.173 | 0.733 |
| <i>Phyllonotus erythrostomus</i> | SPMN | M | 1.801 | 1.255 | -0.032 | 0.293 | -0.879 | 0.191 | 0.802 |
| <i>Pterynotus elongatus</i> | SPMN | M | 1.294 | 5.876 | 0.269 | 0.085 | -1.055 | 0.096 | 0.806 |
| <i>Rapa bubiformis</i> | UMUT | M | 2.129 | 1.003 | -0.128 | 0.050 | -0.098 | 0.151 | 0.805 |
| <i>Rapa rapa</i> | SPMN | M | 2.158 | 0.912 | -0.069 | 0.065 | -0.671 | 0.177 | 0.804 |
| <i>Rapana venosa</i> | SUM | M | 2.238 | 1.488 | -0.200 | 0.296 | -0.248 | 0.192 | 0.805 |
| <i>Siratus alabaster</i> | SPMN | M | 1.714 | 2.497 | 0.017 | 0.227 | -0.470 | 0.160 | 0.809 |
| <i>Tais armigera</i> | SPMN | M | 1.716 | 1.684 | -0.088 | 0.327 | -0.293 | 0.174 | 0.818 |
| <i>Thais bronni</i> | UMUT | M | 1.907 | 1.551 | -0.065 | 0.374 | -0.601 | 0.200 | 0.807 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|----------------------------------|------------|---------|------------------|-------|--------|--------|--------|-----------------------|-------|
| | | | W | T | D | A | G | 1/A | E |
| <i>Thais clavigera</i> | SUM | M | 1.962 | 1.651 | -0.150 | 0.286 | -0.704 | 0.200 | 0.796 |
| <i>Thais haemastoma</i> | SPMN | M | 2.050 | 1.801 | 0.149 | 0.254 | -0.623 | 0.173 | 0.809 |
| <i>Thais kiosquiformis</i> | UMUT | M | 1.732 | 1.846 | -0.004 | 0.450 | -0.865 | 0.180 | 0.799 |
| <i>Trophon geversianus</i> | UMUT | M | 2.261 | 1.417 | -0.036 | 0.174 | -0.477 | 0.181 | 0.808 |
| <i>Urosalpinx cinerea</i> | UMUT | M | 1.777 | 2.250 | -0.016 | 0.288 | -0.546 | 0.175 | 0.808 |
| <i>Vexilla vexillum</i> | UMUT | M | 2.083 | 1.705 | -0.102 | 0.103 | 0.226 | 0.143 | 0.803 |
| Turbinellidae | | | | | | | | | |
| <i>Columbarium harrisium</i> | SPMN | M | 1.419 | 2.529 | 0.363 | 0.215 | -0.682 | 0.134 | 0.810 |
| <i>Columbarium pagoda pagoda</i> | UMUT | M | 1.475 | 2.296 | 0.122 | 0.201 | -0.395 | 0.151 | 0.810 |
| <i>Vasum ceramicum</i> | UMUT | M | 1.522 | 1.961 | -0.206 | 0.397 | 0.110 | 0.151 | 0.791 |
| <i>Vasum turbinellum</i> | UMUT | M | 1.753 | 1.477 | -0.127 | 0.362 | -0.932 | 0.200 | 0.789 |
| Columbellidae | | | | | | | | | |
| <i>Amphissa columbiana</i> | UMUT | M | 1.554 | 2.581 | -0.158 | 0.296 | -0.447 | 0.172 | 0.809 |
| <i>Colubraria cumingii</i> | SPMN | M | 1.301 | 3.536 | -0.083 | 0.137 | -1.138 | 0.154 | 0.781 |
| <i>Parametaria philippinarum</i> | UMUT | M | 1.600 | 1.802 | -0.317 | 0.075 | -0.190 | 0.150 | 0.761 |
| <i>Pyrene splendidula</i> | UMUT | M | 1.374 | 2.591 | -0.087 | -0.138 | -0.252 | 0.151 | 0.815 |
| <i>Strombina lanceolata</i> | UMUT | M | 1.448 | 3.092 | 0.097 | 0.195 | -0.759 | 0.147 | 0.808 |
| Nassariidae | | | | | | | | | |
| <i>Bullia gradata</i> | SPMN | M | 1.640 | 2.687 | -0.196 | 0.177 | -0.114 | 0.152 | 0.795 |
| <i>Nassarius arcularia</i> | UMUT | M | 1.739 | 1.592 | -0.230 | 0.308 | -1.457 | 0.158 | 0.711 |
| <i>Zeuxis margritifera</i> | UMUT | M | 1.438 | 3.070 | 0.069 | 0.279 | -0.817 | 0.154 | 0.805 |
| Buccinidae | | | | | | | | | |
| <i>Balylonia japonica</i> | UMUT | M | 1.836 | 2.094 | 0.083 | 0.431 | 0.020 | 0.158 | 0.809 |
| <i>Balylonia japonica</i> | UMUT | M | 1.849 | 2.099 | 0.086 | 0.545 | -0.478 | 0.161 | 0.809 |
| <i>Balylonia japonica</i> | UMUT | M | 1.827 | 2.089 | 0.158 | 0.567 | -0.246 | 0.179 | 0.810 |
| <i>Buccinum osagawai</i> | SPMN | M | 1.690 | 2.534 | -0.048 | 0.359 | -0.428 | 0.175 | 0.808 |
| <i>Cominella lineolata</i> | UMUT | M | 1.622 | 2.345 | -0.253 | 0.397 | -0.288 | 0.174 | 0.793 |
| <i>Fusinus dupetitthouarsi</i> | SPMN | M | 1.380 | 3.878 | -0.446 | 0.097 | 0.602 | 0.135 | 0.733 |
| <i>Japelion pericochlion</i> | SUM | M | 1.484 | 3.981 | -0.100 | 0.262 | 0.317 | 0.131 | 0.805 |
| <i>Kelletia lischkei</i> | UMUT | M | 1.609 | 2.196 | -0.359 | 0.308 | -0.119 | 0.155 | 0.759 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|-------------------------------------|------------|---------|------------------|----------|----------|----------|----------|-----------------------|----------|
| | | | <i>W</i> | <i>T</i> | <i>D</i> | Δ | Γ | $1/\Lambda$ | <i>E</i> |
| <i>Neptunea antiqua</i> | UMUT | M | 1.710 | 2.010 | -0.154 | 0.287 | -0.076 | 0.162 | 0.812 |
| <i>Neptunea constricta</i> | SUM | M | 1.622 | 2.488 | -0.102 | 0.189 | -0.787 | 0.170 | 0.792 |
| <i>Neptunea lyrata decemcostata</i> | UMUT | M | 2.069 | 1.658 | -0.018 | 0.216 | -0.449 | 0.195 | 0.809 |
| <i>Northia northiae</i> | SPMN | M | 1.489 | 3.298 | -0.401 | 0.199 | -0.491 | 0.146 | 0.717 |
| <i>Penion maxima</i> | SPMN | M | 1.606 | 2.004 | -0.177 | 0.209 | -0.647 | 0.174 | 0.799 |
| <i>Pleuroploca princeps</i> | SPMN | M | 1.592 | 2.571 | -0.070 | 0.168 | -0.241 | 0.157 | 0.808 |
| <i>Siphonalia fusoides</i> | SPMN | M | 1.709 | 2.350 | 0.165 | 0.189 | -0.719 | 0.152 | 0.809 |
| <i>Solenosteria fusiformis</i> | UMUT | M | 1.614 | 2.015 | -0.035 | 0.419 | -0.109 | 0.169 | 0.820 |
| <i>Volutarpa ampullacea perryi</i> | UMUT | M | 2.482 | 1.404 | -0.290 | 0.348 | -0.923 | 0.205 | 0.769 |
| Melongenidae | | | | | | | | | |
| <i>Busycom spiratum</i> | SPMN | M | 2.254 | 0.969 | -0.025 | 0.072 | -0.286 | 0.160 | 0.817 |
| <i>Hemifusus tuba</i> | UMUT | M | 1.739 | 2.076 | -0.171 | 0.187 | -0.262 | 0.166 | 0.809 |
| <i>Melongena melongena</i> | SPMN | M | 1.860 | 1.682 | -0.030 | 0.125 | -0.079 | 0.154 | 0.812 |
| <i>Melongena patula</i> | UMUT | M | 2.316 | 1.033 | -0.250 | 0.207 | -0.133 | 0.164 | 0.785 |
| <i>Pugilina cochlidium</i> | SPMN | M | 1.835 | 1.324 | -0.020 | 0.127 | 0.045 | 0.149 | 0.820 |
| Fasciolariidae | | | | | | | | | |
| <i>Fasciolaria tulipa</i> | SPMN | M | 1.870 | 2.242 | -0.133 | 0.064 | -0.164 | 0.155 | 0.802 |
| <i>Fusinus forceps</i> | UMUT | M | 1.392 | 3.338 | 0.151 | 0.196 | -0.525 | 0.140 | 0.810 |
| <i>Fusinus nicobaricus</i> | UMUT | M | 1.422 | 2.935 | 0.090 | 0.300 | -0.575 | 0.165 | 0.809 |
| <i>Fusinus nicobaricus</i> | SPMN | M | 1.398 | 3.198 | -0.117 | 0.137 | -0.376 | 0.158 | 0.814 |
| <i>Latirus nodatus</i> | UMUT | M | 1.473 | 2.789 | -0.134 | 0.104 | -0.359 | 0.156 | 0.812 |
| <i>Opeatostoma pseudodon</i> | UMUT | M | 1.735 | 1.896 | -0.143 | 0.184 | -0.550 | 0.174 | 0.805 |
| <i>Peristernia incarnata</i> | UMUT | M | 1.335 | 3.297 | -0.465 | 0.503 | -0.709 | 0.144 | 0.611 |
| <i>Pleuroploca glabra</i> | UMUT | M | 1.501 | 3.010 | -0.227 | 0.128 | -0.425 | 0.154 | 0.789 |
| Volutidae | | | | | | | | | |
| <i>Amoria undulata</i> | SPMN | M | 2.040 | 2.333 | -0.250 | 0.146 | -0.083 | 0.154 | 0.786 |
| <i>Cymbium olla</i> | SPMN | M | 3.370 | 1.497 | 0.058 | 0.192 | -0.422 | 0.200 | 0.809 |
| <i>Ericusa sericatum</i> | SPMN | M | 1.547 | 4.034 | -0.213 | 0.097 | -0.098 | 0.132 | 0.792 |
| <i>Fulgoraria clara</i> | SUM | M | 1.950 | 3.049 | 0.077 | 0.025 | -0.039 | 0.122 | 0.809 |
| <i>Lyria planicostata</i> | SPMN | M | 1.448 | 4.140 | -0.164 | 0.084 | 0.175 | 0.129 | 0.797 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|-------------------------------------|------------|---------|------------------|-------|--------|--------|--------|-----------------------|-------|
| | | | W | T | D | A | G | 1/A | E |
| <i>Scaphella dubia</i> | SPMN | M | 1.781 | 3.712 | -0.005 | -0.005 | -0.267 | 0.123 | 0.808 |
| <i>Voluta ebraea</i> | SPMN | M | 1.654 | 2.295 | -0.238 | 0.083 | -0.046 | 0.146 | 0.788 |
| <i>Volutocorbis abyssicola</i> | SPMN | M | 1.802 | 2.526 | -0.098 | 0.101 | -0.065 | 0.147 | 0.807 |
| Olividae | | | | | | | | | |
| <i>Alcospira marginata</i> | UMUT | M | 1.713 | 2.557 | -0.063 | 0.154 | -0.310 | 0.156 | 0.808 |
| <i>Amalda rubiginosa rubiginosa</i> | SPMN | M | 1.686 | 2.962 | 0.055 | 0.087 | -0.011 | 0.133 | 0.809 |
| <i>Oliva porphyria</i> | SPMN | M | 1.916 | 0.674 | -0.192 | -0.016 | 0.056 | 0.142 | 0.775 |
| <i>Oliva textilina</i> | SPMN | M | 1.753 | 0.837 | -0.275 | 0.007 | 0.090 | 0.151 | 0.757 |
| <i>Olivella biplicata</i> | UMUT | M | 1.952 | 1.925 | -0.074 | 0.050 | -0.144 | 0.168 | 0.807 |
| Harpidae | | | | | | | | | |
| <i>Morum grande</i> | SPMN | M | 2.287 | 1.467 | -0.038 | 0.141 | -0.883 | 0.197 | 0.796 |
| <i>Harpa major</i> | SPMN | M | 2.686 | 0.874 | 0.020 | 0.157 | -0.735 | 0.208 | 0.807 |
| Mitridae | | | | | | | | | |
| <i>Cancilla isabella</i> | SPMN | M | 1.383 | 4.816 | -0.138 | 0.146 | -0.025 | 0.134 | 0.804 |
| <i>Mitra eremitarum</i> | SPMN | M | 1.509 | 3.666 | -0.103 | 0.154 | -0.156 | 0.143 | 0.806 |
| <i>Mitra mitra</i> | UMUT | M | 1.526 | 3.769 | -0.495 | 0.145 | 0.274 | 0.131 | 0.722 |
| <i>Mitra swainsoni</i> | SPMN | M | 1.321 | 5.959 | -0.209 | 0.028 | 0.023 | 0.117 | 0.789 |
| Costellariidae | | | | | | | | | |
| <i>Vexillum taeniatum</i> | SPMN | M | 1.299 | 5.068 | -0.169 | -0.007 | 0.222 | 0.127 | 0.792 |
| <i>Pusia cancellaroides</i> | UMUT | M | 1.455 | 2.277 | -0.176 | 0.379 | -0.405 | 0.172 | 0.807 |
| Cystiscidae | | | | | | | | | |
| <i>Cystiscus nanaoensis</i> | UMUT | M | 1.733 | 1.034 | -0.321 | 0.078 | -0.078 | 0.153 | 0.750 |
| Cancellaroidea | | | | | | | | | |
| Cancellariidae | | | | | | | | | |
| <i>Cancellaria nodulifera</i> | UMUT | M | 2.245 | 1.113 | 0.009 | 0.462 | -0.432 | 0.209 | 0.809 |
| <i>Cancellaria spengleriana</i> | UMUT | M | 1.920 | 1.761 | -0.121 | 0.365 | -0.687 | 0.206 | 0.797 |
| Conoidea | | | | | | | | | |
| Conidae | | | | | | | | | |
| <i>Conus pulicarius</i> | SUM | M | 1.394 | 1.184 | 0.088 | 0.262 | 0.000 | 0.144 | 0.796 |
| <i>Conus stimpsoni</i> | SPMN | M | 1.355 | 1.129 | -0.028 | 0.340 | -0.336 | 0.154 | 0.767 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|-----------------------------------|------------|---------|------------------|----------|----------|----------|----------|-----------------------|----------|
| | | | <i>W</i> | <i>T</i> | <i>D</i> | Δ | Γ | $1/\Lambda$ | <i>E</i> |
| <i>Conus euetrios</i> | SPMN | M | 1.448 | 0.773 | -0.097 | 0.012 | -0.221 | 0.146 | 0.753 |
| <i>Conus textile</i> | SPMN | M | 1.742 | 1.484 | -0.226 | 0.012 | 0.109 | 0.148 | 0.785 |
| <i>Conus capitaneus</i> | SPMN | M | 1.752 | 0.467 | -0.065 | -0.019 | 0.130 | 0.149 | 0.775 |
| <i>Conus tulipa</i> | SPMN | M | 2.132 | 1.615 | -0.097 | 0.064 | -0.152 | 0.158 | 0.805 |
| Turridae | | | | | | | | | |
| <i>Bathyomia luhdorfi</i> | UMUT | M | 1.429 | 3.826 | -0.168 | -0.116 | -0.243 | 0.133 | 0.789 |
| <i>Thatcheria mirabilis</i> | SUM | M | 1.694 | 1.362 | 0.087 | -0.322 | -0.084 | 0.148 | 0.820 |
| <i>Turris babylonia</i> | UMUT | M | 1.316 | 4.401 | -0.248 | 0.028 | 0.135 | 0.132 | 0.783 |
| <i>Turris grandis</i> | UMUT | M | 1.263 | 6.265 | -0.202 | 0.173 | -0.308 | 0.125 | 0.790 |
| Terebridae | | | | | | | | | |
| <i>Subula muscaria</i> | UMUT | M | 1.193 | 8.682 | -0.256 | 0.368 | 0.029 | 0.105 | 0.788 |
| <i>Oxymeris crenulatus</i> | UMUT | M | 1.233 | 6.914 | -0.275 | 0.381 | -0.042 | 0.117 | 0.786 |
| Heterobranchia | | | | | | | | | |
| Architectonicae | | | | | | | | | |
| Architectonicidae | | | | | | | | | |
| <i>Architectonica perspectiva</i> | UMUT | M | 1.650 | 0.794 | 0.366 | 0.295 | -0.134 | 0.139 | 0.821 |
| <i>Architectonica taylori</i> | UMUT | M | 1.613 | 0.789 | 0.335 | 0.677 | -0.418 | 0.153 | 0.818 |
| <i>Phsilaxis radiatus</i> | UMUT | M | 1.821 | 0.744 | 0.269 | 0.184 | -0.184 | 0.131 | 0.819 |
| Pyramidelloidea | | | | | | | | | |
| Pyramidellidae | | | | | | | | | |
| <i>Longchaeus canaliculatus</i> | UMUT | M | 1.209 | 4.901 | -0.096 | 0.217 | -0.455 | 0.142 | 0.817 |
| <i>Otopleura mitralis</i> | UMUT | M | 1.324 | 3.045 | -0.230 | 0.594 | -0.949 | 0.175 | 0.769 |
| <i>Pyramidella dolabrata</i> | UMUT | M | 1.234 | 4.099 | -0.138 | -0.030 | -0.264 | 0.146 | 0.808 |
| Opithobranchia | | | | | | | | | |
| Cephalaspidea | | | | | | | | | |
| Actenoidea | | | | | | | | | |
| Acteonidae | | | | | | | | | |
| <i>Acteon tornatilis</i> | UMUT | M | 1.718 | 2.071 | -0.070 | 0.005 | -0.126 | 0.149 | 0.807 |
| <i>Acteon tornatilis</i> | UMUT | M | 1.864 | 1.825 | -0.043 | -0.021 | 0.124 | 0.144 | 0.809 |
| <i>Pupa strigosa</i> | UMUT | M | 1.902 | 2.101 | -0.192 | 0.099 | -0.557 | 0.172 | 0.791 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|----------------------------|------------|---------|------------------|-------|--------|-------|----------|-----------------------|-------|
| | | | W | T | D | A | Γ | 1/A | E |
| Scaphandridae | | | | | | | | | |
| <i>Scaphander lignaria</i> | UMUT | M | 1.732 | 1.611 | -0.255 | 0.109 | 0.390 | 0.147 | 0.781 |
| Haminoeoidea | | | | | | | | | |
| Haminoeidae | | | | | | | | | |
| <i>Atys naucum</i> | UMUT | M | 2.219 | 0.323 | 0.014 | 0.080 | -0.019 | 0.141 | 0.798 |
| Bulloidea | | | | | | | | | |
| Bullidae | | | | | | | | | |
| <i>Bulla vernicosa</i> | SUM | M | 1.479 | 0.964 | -0.347 | 0.145 | -0.422 | 0.152 | 0.699 |
| <i>Bulla vernicosa</i> | UMUT | M | 1.634 | 1.600 | -0.215 | 0.135 | -0.567 | 0.168 | 0.789 |
| Hydatinoidea | | | | | | | | | |
| Hydatinidae | | | | | | | | | |
| <i>Hydatina amplustre</i> | UMUT | M | 3.355 | 1.262 | -0.113 | 0.019 | -0.370 | 0.179 | 0.803 |
| <i>Hydatina physis</i> | UMUT | M | 5.311 | 1.376 | -0.101 | 0.087 | -0.124 | 0.193 | 0.806 |
| Ringiculoidea | | | | | | | | | |
| Ringiculidae | | | | | | | | | |
| <i>Ringiculina kurodai</i> | UMUT | M | 1.844 | 2.154 | -0.133 | 0.045 | -0.275 | 0.156 | 0.801 |
| Pulmonata | | | | | | | | | |
| Basommatophora | | | | | | | | | |
| Chilinoidea | | | | | | | | | |
| Chilinidae | | | | | | | | | |
| <i>Chilina parchappei</i> | UMUT | F | 2.190 | 2.277 | -0.257 | 0.396 | -0.521 | 0.207 | 0.795 |
| Lymnaeoidea | | | | | | | | | |
| Lymnaeidae | | | | | | | | | |
| <i>Radix swinhoei</i> | UMUT | F | 2.501 | 1.910 | -0.136 | 0.321 | 0.058 | 0.181 | 0.808 |
| <i>Radix swinhoei</i> | UMUT | F | 3.024 | 1.854 | -0.218 | 0.299 | -0.209 | 0.224 | 0.802 |
| <i>Radix auricularia</i> | UMUT | F | 4.001 | 0.976 | -0.153 | 0.334 | -0.342 | 0.265 | 0.805 |
| <i>Lymnaea stagnalis</i> | SHIN | F | 2.031 | 2.331 | -0.159 | 0.384 | -0.253 | 0.196 | 0.806 |
| Planorboidea | | | | | | | | | |
| Planorbidae | | | | | | | | | |
| <i>Gyraulus chinensis</i> | UMUT | F | 1.361 | 0.251 | 0.483 | 0.701 | -0.391 | 0.115 | 0.794 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|--|------------|---------|------------------|----------|----------|----------|----------|-----------------------|----------|
| | | | <i>W</i> | <i>T</i> | <i>D</i> | Δ | Γ | $1/\Lambda$ | <i>E</i> |
| <i>Planorbarius corneus</i> | SPMN | F | 1.236 | 0.388 | 0.322 | -0.493 | -0.738 | 0.116 | 0.701 |
| Physidae | | | | | | | | | |
| <i>Physa acuta</i> | SHIN | F | 1.933 | 2.291 | -0.305 | 0.223 | -0.719 | 0.186 | 0.757 |
| Euplumonata | | | | | | | | | |
| Ellobioidea | | | | | | | | | |
| Ellobiidae | | | | | | | | | |
| <i>Cassidula nucleus</i> | UMUT | L | 1.641 | 1.080 | -0.037 | 0.209 | -0.749 | 0.170 | 0.796 |
| <i>Ellobium chinense</i> | UMUT | L | 1.514 | 2.461 | -0.138 | 0.217 | -0.080 | 0.154 | 0.815 |
| <i>Melampus flavus</i> | UMUT | L | 1.619 | 1.311 | 0.051 | 0.054 | -0.600 | 0.156 | 0.816 |
| <i>Pythia pantherina</i> | SUM | L | 1.381 | 1.867 | -0.172 | 0.317 | -0.253 | 0.158 | 0.785 |
| Stylommatophora | | | | | | | | | |
| Elasmograta | | | | | | | | | |
| Succineoidea | | | | | | | | | |
| Succineidae | | | | | | | | | |
| <i>Succinea lauta</i> | SHIN | L | 3.908 | 1.762 | -0.407 | 0.407 | -0.414 | 0.218 | 0.784 |
| Orthurethra | | | | | | | | | |
| Enoidea | | | | | | | | | |
| Enidae | | | | | | | | | |
| <i>Buliminus sinaiensis</i> | SPMN | L | 1.303 | 4.937 | -0.031 | 0.412 | -0.842 | 0.138 | 0.797 |
| Sigmurethra | | | | | | | | | |
| Clausiloidea | | | | | | | | | |
| Clausiliidae | | | | | | | | | |
| <i>Achatinella apexfulva</i> (<i>A. leucorraphe</i>) | BPBM | L | 1.530 | 1.962 | -0.019 | 0.588 | 0.472 | 0.141 | 0.821 |
| <i>Achatinella bulimoides mistura</i> | BPBM | L | 1.484 | 2.225 | -0.068 | 0.462 | -0.176 | 0.169 | 0.821 |
| <i>Achatinella mustelina</i> | BPBM | L | 1.547 | 2.180 | -0.162 | 0.523 | -0.225 | 0.182 | 0.814 |
| <i>Auriculella aurieula</i> | BPBM | L | 1.452 | 2.819 | -0.108 | 0.448 | -0.518 | 0.176 | 0.811 |
| <i>Auriculella montana</i> | BPBM | L | 1.584 | 2.328 | -0.239 | 0.391 | -0.557 | 0.186 | 0.799 |
| <i>Luchuphaedusa inclyta</i> | SPMN | L | 1.203 | 6.958 | 0.143 | -0.098 | -1.326 | 0.096 | 0.766 |
| <i>Megalophaedusa martensi</i> | SHIN | L | 1.208 | 7.603 | -0.029 | 0.048 | -0.618 | 0.111 | 0.803 |
| <i>Partulina splendida</i> | BPBM | L | 1.550 | 2.582 | -0.138 | 0.558 | -0.359 | 0.192 | 0.806 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|-----------------------------------|------------|---------|------------------|-------|--------|-------|----------|-----------------------|-------|
| | | | W | T | D | A | Γ | 1/A | E |
| Streptaxidiae | | | | | | | | | |
| <i>Euglandia rosea</i> | UMUT | L | 1.812 | 3.092 | -0.085 | 0.275 | -0.238 | 0.160 | 0.808 |
| Rhytidoidea | | | | | | | | | |
| Rhytididae | | | | | | | | | |
| <i>Rhytida dunniae</i> | UMUT | L | 2.592 | 0.546 | 0.089 | 0.605 | -0.312 | 0.195 | 0.814 |
| Rhytidoidea | | | | | | | | | |
| Haplotremaidae | | | | | | | | | |
| <i>Pedinogyra hayii</i> | SPMN | L | 1.509 | 1.606 | 0.297 | 0.959 | -0.070 | 0.164 | 0.809 |
| Acavoidea | | | | | | | | | |
| Acavidae | | | | | | | | | |
| <i>Acavus haemastoma</i> | SHIN | L | 2.283 | 1.440 | -0.054 | 0.879 | -0.372 | 0.162 | 0.807 |
| <i>Acavus haemastoma</i> | SHIN | L | 2.685 | 1.356 | -0.013 | 0.869 | -0.262 | 0.181 | 0.808 |
| <i>Brazieresta naturalistarum</i> | UMUT | L | 1.696 | 2.596 | -0.075 | 0.334 | -0.321 | 0.171 | 0.808 |
| Caryodidae | | | | | | | | | |
| <i>Pedinogyra hayii</i> | SHIN | L | 1.436 | 0.636 | 0.240 | 1.059 | -0.125 | 0.155 | 0.786 |
| Zonitoidea | | | | | | | | | |
| Zonitidae | | | | | | | | | |
| <i>Coxia macgregori</i> | SPMN | L | 1.145 | 0.200 | 0.546 | 0.883 | -0.100 | 0.094 | 0.695 |
| <i>Oxychilus draparnaudi</i> | UMUT | L | 1.819 | 0.602 | 0.088 | 0.543 | -0.438 | 0.169 | 0.804 |
| Helicarionoidea | | | | | | | | | |
| Helicarionidae | | | | | | | | | |
| <i>Ryssota lamarckiana</i> | SPMN | L | 2.662 | 0.632 | -0.077 | 0.801 | -0.209 | 0.235 | 0.810 |
| Ariophantidae | | | | | | | | | |
| <i>Megaustenia siamensis</i> | SHIN | L | 5.306 | 0.878 | 0.011 | 0.638 | 0.083 | 0.189 | 0.808 |
| Helicoidea | | | | | | | | | |
| Helicidae | | | | | | | | | |
| <i>Eobania vermiculata</i> | SPMN | L | 1.890 | 0.936 | -0.190 | 0.926 | -0.191 | 0.191 | 0.781 |
| <i>Helix pomatia</i> | SHIN | L | 2.149 | 1.248 | -0.142 | 0.524 | -0.492 | 0.232 | 0.807 |
| <i>Cepaea hortensis</i> | SHIN | L | 1.827 | 1.085 | -0.075 | 0.868 | -0.276 | 0.227 | 0.811 |
| <i>Cepaea nemoralis</i> | SHIN | L | 2.614 | 0.593 | 0.126 | 0.512 | -0.407 | 0.197 | 0.810 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|------------------------------------|------------|---------|------------------|-------|--------|-------|----------|-----------------------|-------|
| | | | W | T | D | A | Γ | 1/A | E |
| Bradybaenidae | | | | | | | | | |
| <i>Acusta despecta despecta</i> | UMUT | L | 1.862 | 1.099 | -0.072 | 0.515 | -0.296 | 0.187 | 0.812 |
| <i>Aegista elegantissima</i> | UMUT | L | 1.661 | 0.495 | 0.222 | 0.956 | -0.021 | 0.148 | 0.803 |
| <i>Aegista elegantissima</i> | UMUT | L | 1.717 | 0.549 | 0.157 | 1.023 | -0.276 | 0.184 | 0.805 |
| <i>Aegista hatakedai</i> | SHIN | L | 1.747 | 0.681 | 0.161 | 0.798 | -0.033 | 0.156 | 0.811 |
| <i>Aegista oculus</i> | UMUT | L | 1.453 | 0.774 | 0.327 | 1.032 | -0.264 | 0.161 | 0.812 |
| <i>Bradybaena pellucida</i> | SHIN | L | 2.123 | 0.900 | 0.005 | 0.637 | 0.013 | 0.176 | 0.816 |
| <i>Bradybaena similaris</i> | SHIN | L | 1.791 | 0.872 | -0.140 | 0.617 | -0.160 | 0.168 | 0.787 |
| <i>Bradybaena similaris</i> | SHIN | L | 1.778 | 0.882 | 0.058 | 0.645 | 0.112 | 0.154 | 0.812 |
| <i>Calocochlia zonifera</i> | SPMN | L | 1.687 | 1.688 | -0.134 | 0.724 | -0.307 | 0.217 | 0.812 |
| <i>Chloraea stenopsis</i> | UMUT | L | 1.812 | 0.878 | -0.043 | 0.679 | -0.461 | 0.200 | 0.804 |
| <i>Chrysallis caniceps</i> | SHIN | L | 1.466 | 3.427 | -0.150 | 0.389 | -0.307 | 0.164 | 0.805 |
| <i>Chrysallis virgata</i> | SHIN | L | 1.573 | 2.973 | -0.152 | 0.559 | -0.536 | 0.194 | 0.802 |
| <i>Chrysallis virgata</i> | SHIN | L | 1.392 | 3.815 | -0.329 | 0.482 | -0.106 | 0.147 | 0.776 |
| <i>Chrysallis virgata</i> | SPMN | L | 1.454 | 3.607 | -0.406 | 0.508 | -0.531 | 0.160 | 0.721 |
| <i>Euhadra aomoriensis</i> | SHIN | L | 1.941 | 0.691 | 0.048 | 0.662 | -0.145 | 0.171 | 0.809 |
| <i>Euhadra aomoriensis</i> | SHIN | L | 1.910 | 0.827 | 0.075 | 0.644 | -0.075 | 0.167 | 0.814 |
| <i>Euhadra aomoriensis</i> | SHIN | L | 1.868 | 0.739 | 0.056 | 0.696 | -0.236 | 0.178 | 0.811 |
| <i>Euhadra aomoriensis</i> | SHIN | L | 1.990 | 0.808 | 0.057 | 0.655 | -0.423 | 0.200 | 0.814 |
| <i>Euhadra herklotzi herklotzi</i> | SPMN | L | 1.851 | 0.805 | 0.089 | 0.839 | -0.391 | 0.207 | 0.813 |
| <i>Euhadra quaesita</i> | SHIN | L | 1.802 | 1.041 | 0.028 | 0.460 | -0.581 | 0.187 | 0.814 |
| <i>Euhadra quaesita</i> | SHIN | L | 2.087 | 0.814 | 0.067 | 0.705 | -0.454 | 0.216 | 0.812 |
| <i>Euhadra quaesita</i> | SHIN | L | 2.158 | 0.550 | 0.102 | 0.417 | -0.317 | 0.164 | 0.812 |
| <i>Euhadra sandai communis</i> | SPMN | L | 2.007 | 0.664 | 0.096 | 0.803 | -0.331 | 0.198 | 0.813 |
| <i>Euhadra scaebola</i> | SPMN | L | 1.716 | 0.563 | 0.162 | 0.994 | -0.213 | 0.177 | 0.805 |
| <i>Helicostyla marinduquensis</i> | SPMN | L | 1.767 | 1.852 | -0.281 | 0.687 | -0.035 | 0.183 | 0.781 |
| <i>Helicostyla mirabilis</i> | SPMN | L | 2.284 | 1.214 | -0.143 | 0.715 | -0.242 | 0.258 | 0.805 |
| <i>Trishoplita pallens</i> | SHIN | L | 1.774 | 0.693 | 0.117 | 0.671 | -0.116 | 0.158 | 0.809 |
| Camaenidae | | | | | | | | | |
| <i>Amphidromus atricallosus</i> | SHIN | L | 1.585 | 2.616 | -0.277 | 0.446 | -0.432 | 0.183 | 0.787 |

| Species | Repository | Habitat | model parameters | | | | | functional parameters | |
|-----------------------------------|------------|---------|------------------|----------|----------|----------|----------|-----------------------|----------|
| | | | <i>W</i> | <i>T</i> | <i>D</i> | Δ | Γ | $1/\Lambda$ | <i>E</i> |
| <i>Amphidromus perversus</i> | SHIN | L | 1.496 | 2.724 | -0.115 | 0.422 | -0.280 | 0.172 | 0.815 |
| <i>Amphidromus perversus</i> | SHIN | L | 1.645 | 2.429 | -0.274 | 0.441 | -0.533 | 0.194 | 0.789 |
| <i>Helicostyla horida</i> | SHIN | L | 1.595 | 2.235 | -0.215 | 0.790 | 0.299 | 0.155 | 0.795 |
| <i>Papuia hindei</i> | SPMN | L | 1.591 | 2.895 | -0.272 | 0.650 | 0.144 | 0.163 | 0.788 |
| <i>Papuina chapmani</i> | SPMN | L | 1.764 | 1.857 | -0.198 | 0.901 | 0.088 | 0.190 | 0.800 |
| <i>Papuina malantanensis</i> | SPMN | L | 1.633 | 1.703 | -0.131 | 1.043 | 0.171 | 0.176 | 0.807 |
| <i>Papuina melanesia</i> | SPMN | L | 1.822 | 1.405 | 0.043 | 0.955 | -0.306 | 0.172 | 0.808 |
| <i>Phoenicobius aratus</i> | SHIN | L | 1.435 | 2.643 | -0.077 | 0.651 | -0.598 | 0.193 | 0.808 |
| <i>Pleurodonte lamarckii</i> | UMUT | L | 1.615 | 0.819 | -0.194 | 1.075 | -0.085 | 0.164 | 0.749 |
| <i>Satsuma ferruginea</i> | SHIN | L | 1.648 | 1.082 | -0.052 | 0.770 | -0.026 | 0.169 | 0.808 |
| <i>Satsuma japonica</i> | SHIN | L | 1.555 | 1.327 | -0.112 | 0.938 | -0.327 | 0.212 | 0.796 |
| <i>Satsuma largillierti</i> | UMUT | L | 1.637 | 1.252 | -0.143 | 0.699 | -0.403 | 0.200 | 0.798 |
| <i>Sphaerospira appendiculata</i> | SHIN | L | 1.798 | 1.280 | -0.102 | 0.910 | -0.527 | 0.185 | 0.801 |
| <i>Sphaerospira mattea</i> | SHIN | L | 1.624 | 1.210 | -0.133 | 0.860 | -0.477 | 0.222 | 0.797 |
| <i>Sphaerospira mattea</i> | SHIN | L | 1.699 | 0.889 | -0.089 | 0.923 | -0.360 | 0.215 | 0.796 |
| <i>Xanthomelon pachystylum</i> | SPMN | L | 2.233 | 1.163 | -0.140 | 0.765 | -0.074 | 0.223 | 0.809 |
| Helminthoglyptidae | | | | | | | | | |
| <i>Micrarionta kelletti</i> | UMUT | L | 1.946 | 0.858 | -0.082 | 0.847 | -0.698 | 0.229 | 0.794 |
| Hygromiidae | | | | | | | | | |
| <i>Helicigona faustina</i> | SPMN | L | 1.832 | 0.637 | 0.145 | 0.852 | -0.244 | 0.179 | 0.812 |