**Supplemental Files**

**Table S1:** Prey categories consumed by *Xenopus laevis*, *Xenopus gilli* and obtained during habitat sampling at the CoGH for small frogs.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CoGH**  **30 – 52 mm** | **Environment** | | ***Xenopus laevis*** n = 74 | | | | |  | ***Xenopus gilli*** n = 36 | | | | |  |
| **Order** | Ne | Ne (%) | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* |
| Anisoptera | 38 | 1.32 | 23 | 2.58 | 12 | 35.76 | 0.35 | 3.561 | 10 | 0.67 | 5 | 2.91 | -0.32 | -2.105 |
| Coleoptera | 9 | 0.31 | 11 | 1.23 | 7 | 2.61 | 0.62 | 5.154 | 23 | 1.54 | 17 | 7.60 | 0.67 | 8.643\* |
| Ephemeroptera | 8 | 0.28 | 0 | 0 | 0 | 0.00 | -1.00 | -1.530\* | 3 | 0.2 | 3 | 0.04 | -0.15 | -0.521 |
| Heteroptera | 61 | 2.12 | 6 | 0.67 | 4 | 0.85 | -0.50 | -2.806\* | 0 | 0 | 0 | 0.00 | -1.00 | -5.556\* |
| Hymenoptera | 0 | 0 | 0 | 0 | 0 | 0.00 |  |  | 1 | 0.07 | 1 | 0.00 | NA | NA |
| Nematocera | 49 | 1.71 | 37 | 4.15 | 17 | 3.50 | 0.45 | 5.982\* | 22 | 1.47 | 14 | 1.59 | -0.06 | -0.562 |
| Neuroptera | 0 | 0 | 1 | 0.11 | 1 | 0.01 |  |  | 0 | 0 | 0 | 0.00 | NA | NA |
| Psocoptera | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.541\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.711\* |
| Trichoptera | 29 | 1.01 | 3 | 0.34 | 3 | 0.19 | -0.48 | -1.884\* | 36 | 2.41 | 20 | 6.07 | 0.43 | 5.566\* |
| Zygentoma | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.541\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.711\* |
| Zygoptera | 2368 | 82.42 | 14 | 1.57 | 9 | 6.07 | -0.99 | -25.796\* | 89 | 5.95 | 28 | 91.36 | -0.97 | -32.047\* |
| Amphipoda | 7 | 0.24 | 31 | 3.48 | 5 | 1.30 | 0.88 | 20.225\* | 407 | 27.22 | 23 | 100.00 | 0.99 | 214.355\* |
| *Daphnia* | 98 | 3.41 | 0 | 0 | 0 | 0.00 | -1.00 | -5.356\* | 477 | 31.91 | 5 | 11.51 | 0.87 | 60.689\* |
| Ostracoda | 173 | 6.02 | 578 | 64.87 | 33 | 100.00 | 0.94 | 74.106\* | 336 | 22.47 | 20 | 31.99 | 0.65 | 26.552\* |
| Acari | 13 | 0.45 | 138 | 15.49 | 27 | 18.54 | 0.95 | 68.791\* | 51 | 3.41 | 8 | 1.85 | 0.78 | 17.318\* |
| Aranae | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.541\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.711\* |
| Anuran egg | 0 | 0 | 0 | 0 | 0 | 0.00 | 0.35 | 3.561\* | 1 | 0.07 | 1 | 0.01 | NA | NA |
| Tadpole spec | 0 | 0 | 29 | 3.25 | 26 | 3.69 | 0.62 | 5.154\* | 15 | 1 | 14 | 0.94 | NA | NA |
| *Xenopus* tadpole | 17 | 0.59 | 0 | 0 | 0 | 0.00 | -1.00 | -1.530\* | 0 | 0 | 0 | 0.00 | -1.00 | -2.933\* |
| N, total number of individuals obtained; N% percentage of N; Freq, frequency of occurrence; Freq % percentages of frequency of occurrence; *IRI* (%), index of relative importance; *E*\*, Electivity index; *χ2* = Chi-square residuals, significant values are marked with an asterisk. | | | | | | | | | | | | | | |

**Table S2:** Prey categories consumed by *Xenopus laevis*, *Xenopus gilli* and obtained during habitat sampling at the CoGH for large frogs.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CoGH**  **52 – 72 mm** | **Environment** | | ***Xenopus laevis*** n = 12 | | | | |  | ***Xenopus gilli*** n = 26 | | | | |  |
| **Order** | Ne | Ne (%) | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* |
| Anisoptera | 38 | 1.32 | 0 | 0 | 0 | 0.00 | -1.00 | -0.891\* | 1 | 0.56 | 1 | 1.22 | -0.36 | -0.767 |
| Coleoptera | 9 | 0.31 | 9 | 12.86 | 4 | 91.12 | 0.97 | 20.326\* | 7 | 3.93 | 5 | 3.77 | 0.87 | 9.179 |
| Ephemeroptera | 8 | 0.28 | 0 | 0 | 0 | 0.00 | -1.00 | -0.409\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.667\* |
| Heteroptera | 61 | 2.12 | 8 | 11.43 | 3 | 73.39 | 0.75 | 5.959 | 1 | 0.56 | 1 | 0.09 | -0.55 | -1.301 |
| Hymenoptera | 0 | 0 | 1 | 1.43 | 1 | 1.82 | NA | NA | 2 | 1.12 | 2 | 0.30 | NA | NA |
| Nematocera | 49 | 1.71 | 27 | 38.57 | 1 | 33.25 | 0.96 | 25.679\* | 1 | 0.56 | 1 | 0.08 | -0.47 | -1.047 |
| Neuroptera | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | NA | 0 | 0 | 0 | 0.00 | NA | NA |
| Psocoptera | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.145\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.236\* |
| Trichoptera | 29 | 1.01 | 4 | 5.71 | 1 | 8.59 | 0.75 | 4.362 | 4 | 2.25 | 3 | 2.05 | 0.43 | 1.877 |
| Zygentoma | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.145\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.236\* |
| Zygoptera | 2368 | 82.42 | 8 | 11.43 | 4 | 100.00 | -0.94 | -5.89\*5 | 24 | 13.48 | 9 | 100.00 | -0.93 | -9.394\* |
| Amphipoda | 7 | 0.24 | 3 | 4.29 | 2 | 71.84 | 0.91 | 7.464 | 90 | 50.56 | 6 | 54.42 | 1.00 | 143.521\* |
| *Daphnia* | 98 | 3.41 | 0 | 0 | 0 | 0.00 | -1.00 | -1.431\* | 16 | 8.99 | 1 | 1.27 | 0.52 | 4.513 |
| Ostracoda | 173 | 6.02 | 0 | 0 | 0 | 0.00 | -1.00 | -1.901\* | 16 | 8.99 | 5 | 6.30 | 0.27 | 2.051 |
| Acari | 13 | 0.45 | 1 | 1.43 | 1 | 1.17 | 0.58 | 1.398 | 0 | 0 | 0 | 0.00 | -1.00 | -0.851\* |
| Aranae | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.145\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.236\* |
| Anuran egg | 0 | 0 | 6 | 8.57 | 6 | 42.05 | NA | NA | 5 | 2.81 | 5 | 1.89 | NA | NA |
| Tadpole spec | 0 | 0 | 1 | 1.43 | 1 | 1.17 | NA | NA | 0 | 0 | 0 | 0.00 | NA | NA |
| *Xenopus* tadpole | 17 | 0.59 | 0 | 0 | 0 | 0.00 | -1.00 | -0.596\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.973\* |
| N, total number of individuals obtained; N% percentage of N; Freq, frequency of occurrence; Freq % percentages of frequency of occurrence; *IRI* (%), index of relative importance; *E*\*, Electivity index; *χ2* = Chi-square residuals, significant values are marked with an asterisk. | | | | | | | | | | | | | | |

**Table S3:** Prey categories consumed by *Xenopus laevis* and obtained during habitat sampling at the CoGH for very large frogs.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CoGH**  **>72 mm** | **Environment** | | ***Xenopus laevis*** n = 10 | | | | |  |
| **Order** | Ne | Ne (%) | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* |
| Anisoptera | 38 | 1.32 | 4 | 7.02 | 2 | 37.30 | 0.83 | 5.487 |
| Brachycera | 0 | 0 | 3 | 5.26 | 1 | 9.45 | NA | NA |
| Ephemeroptera | 8 | 0.28 | 0 | 0 | 0 | 0.00 | -1.00 | -0.299\* |
| Heteroptera | 61 | 2.12 | 1 | 1.75 | 1 | 0.95 | 0.19 | 0.386 |
| Hymenoptera | 0 | 0 | 8 | 14.04 | 3 | 24.60 | NA | NA |
| Nematocera | 49 | 1.71 | 1 | 1.75 | 1 | 0.99 | 0.30 | 0.612 |
| Psocoptera | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.106\* |
| Trichoptera | 29 | 1.01 | 7 | 12.28 | 3 | 25.23 | 0.93 | 11.728 |
| Zygentoma | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.106\* |
| Zygoptera | 2368 | 82.42 | 2 | 3.51 | 2 | 14.95 | -0.97 | -4.755\* |
| Amphipoda | 7 | 0.24 | 9 | 15.79 | 3 | 100.00 | 0.99 | 31.902\* |
| *Daphnia* | 98 | 3.41 | 0 | 0 | 0 | 0.00 | -1.00 | -1.046\* |
| *Ostracoda* | 173 | 6.02 | 8 | 14.04 | 1 | 7.76 | 0.68 | 4.364 |
| Acari | 13 | 0.45 | 0 | 0 | 0 | 0.00 | -1.00 | -0.381\* |
| Aranae | 1 | 0.03 | 0 | 0 | 0 | 0.00 | -1.00 | -0.106\* |
| Tadpole spec | 0 | 0 | 10 | 17.54 | 6 | 57.13 | NA | NA |
| *Xenopus* tadpole | 17 | 0.59 | 0 | 0 | 0 | 0.00 | -1.00 | -0.436\* |
| N, total number of individuals obtained; N% percentage of N; Freq, frequency of occurrence; Freq % percentages of frequency of occurrence; *IRI* (%), index of relative importance; *E*\*, Electivity index; *χ2* = Chi-square residuals, significant values are marked with an asterisk. | | | | | | | | |

**Table S4:** Prey categories consumed by *Xenopus laevis*, *Xenopus gilli* and obtained during habitat sampling at the Kleinmond for small frogs.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Kleinmond**  **30 – 52 mm** | **Environment** | | ***Xenopus laevis*** n = 15 | | | | |  | ***Xenopus gilli*** n = 36 | | | | |  |
| **Order** | Ne | Ne (%) | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* |
| Blattodea | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | NA | 2 | 0.52 | 1 | 0.05 | NA | NA |
| Brachycera | 0 | 0 | 1 | 0.92 | 1 | 0.11 | NA | NA | 0 | 0 | 0 | 0.00 | NA | NA |
| Coleoptera | 260 | 15.09 | 10 | 9.17 | 7 | 8.47 | -0.25 | -1.406 | 85 | 22.31 | 23 | 100.00 | 0.32 | 4.960\* |
| Collembola | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | NA | 1 | 0.26 | 1 | 0.03 | NA | NA |
| Ephemeroptera | 9 | 0.52 | 0 | 0 | 0 | 0.00 | -1.00 | -0.733\* | 0 | 0 | 0 | 0.00 | -1.00 | -1.315\* |
| Heteroptera | 166 | 9.63 | 1 | 0.92 | 1 | 0.14 | -0.83 | -2.833\* | 5 | 1.31 | 4 | 1.26 | -0.75 | -4.762\* |
| Hymenoptera | 1 | 0.06 | 0 | 0 | 0 | 0.00 | -1.00 | -0.244\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.438\* |
| Nematocera | 2 | 0.12 | 2 | 1.83 | 1 | 0.22 | 0.89 | 5.438 | 5 | 1.31 | 4 | 2.60 | 0.86 | 7.447 |
| Sternorrhyncha | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | NA | 1 | 0.26 | 1 | 0.03 | NA | NA |
| Trichoptera | 0 | 0 | 2 | 1.83 | 1 | 0.22 | NA | NA | 6 | 1.57 | 4 | 0.82 | NA | NA |
| Amphipoda | 496 | 28.79 | 3 | 2.75 | 3 | 1.08 | -0.86 | -4.894\* | 27 | 7.09 | 11 | 30.30 | -0.64 | -6.995\* |
| *Daphnia* | 1 | 0.06 | 2 | 1.83 | 1 | 0.22 | 0.94 | 7.936 | 27 | 7.09 | 7 | 7.02 | 0.99 | 61.163\* |
| Ostracoda | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | NA | 21 | 5.51 | 9 | 4.88 | NA | NA |
| Acari | 11 | 0.64 | 0 | 0 | 0 | 0.00 | -1.00 | -0.811\* | 2 | 0.52 | 1 | 0.08 | -0.03 | -0.078 |
| Aranae | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | NA | 1 | 0.26 | 1 | 0.03 | NA | NA |
| Pseudoscorpiones | 1 | 0.06 | 0 | 0 | 0 | 0.00 | -1.00 | -0.244\* | 0 | 0 | 0 | 0.00 | -1.00 | -0.438\* |
| Annelida | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | NA | 1 | 0.26 | 1 | 2.31 | NA | NA |
| *Cacosternum* | 0 | 0 | 1 | 0.92 | 1 | 2.67 | NA | NA | 1 | 0.26 | 1 | 0.03 | NA | NA |
| Anuran egg | 1 | 0.06 | 73 | 66.97 | 3 | 25.03 | 1.00 | 298.326\* | 169 | 44.36 | 6 | 34.68 | 1.00 | 385.142\* |
| Tadpole spec | 81 | 4.7 | 12 | 11.01 | 10 | 100.00 | 0.46 | 3.253 | 10 | 2.62 | 10 | 2.51 | -0.23 | -1.410 |
| *Xenopus* tadpole | 694 | 40.28 | 0 | 0 | 0 | 0.00 | -1.00 | -6.441\* | 1 | 0.26 | 1 | 0.36 | -0.99 | -11.460\* |
| N, total number of individuals obtained; N% percentage of N; Freq, frequency of occurrence; Freq % percentages of frequency of occurrence; *IRI* (%), index of relative importance; *E*\*, Electivity index; *χ2* = Chi-square residuals, significant values are marked with an asterisk. | | | | | | | | | | | | | | |

**Table S5:** Prey categories consumed by *Xenopus laevis*, *Xenopus gilli* and obtained during habitat sampling at the Kleinmond for large frogs.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Kleinmond**  **52 – 72 mm** | **Environment** | | ***Xenopus laevis*** n = 33 | | | | | | |  | ***Xenopus gilli*** n = 60 | | | | |  |
| **Order** | Ne | Ne (%) | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* | | | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* |
| Coleoptera | 260 | 15.09 | 36 | 3.3 | 14 | 7.00 | -0.68 | | -9.953\* | | 38 | 7.47 | 18 | 6.90 | -0.36 | -4.206\* |
| Ephemeroptera | 9 | 0.52 | 0 | 0 | 0 | 0.00 | -1.00 | | -2.376\* | | 0 | 0 | 0 | 0.00 | -1.00 | -1.603\* |
| Heteroptera | 166 | 9.63 | 17 | 1.56 | 7 | 2.55 | -0.74 | | -8.539\* | | 7 | 1.38 | 3 | 0.14 | -0.76 | -5.868\* |
| Hymenoptera | 1 | 0.06 | 0 | 0 | 0 | 0.00 | -1.00 | | -0.792\* | | 0 | 0 | 0 | 0.00 | -1.00 | -0.534\* |
| Nematocera | 2 | 0.12 | 5 | 0.46 | 3 | 0.16 | 0.60 | | 3.343 | | 9 | 1.77 | 6 | 0.30 | 0.88 | 11.154 |
| Trichoptera | 0 | 0 | 1 | 0.09 | 1 | 0.01 | NA | | NA | | 0 | 0 | 0 | 0.00 | NA | NA |
| Zygoptera | 0 | 0 | 1 | 0.09 | 1 | 0.04 | NA | | NA | | 0 | 0 | 0 | 0.00 | NA | NA |
| Amphipoda | 496 | 28.79 | 3 | 0.27 | 3 | 0.10 | -0.99 | | -17.470\* | | 5 | 0.98 | 2 | 0.13 | -0.95 | -11.481\* |
| *Daphnia* | 1 | 0.06 | 434 | 39.74 | 1 | 5.55 | 1.00 | | 547.131\* | | 208 | 40.86 | 8 | 10.27 | 1.00 | 388.711\* |
| Ostracoda | 0 | 0 | 1 | 0.09 | 1 | 0.01 | NA | | NA | | 2 | 0.39 | 1 | 0.01 | NA | NA |
| Acari | 11 | 0.64 | 1 | 0.09 | 1 | 0.01 | -0.75 | | -2.246\* | | 2 | 0.39 | 2 | 0.02 | -0.22 | -0.644 |
| Pseudoscorpiones | 1 | 0.06 | 0 | 0 | 0 | 0.00 | -1.00 | | -0.792\* | | 0 | 0 | 0 | 0.00 | -1.00 | -0.534\* |
| *Cacosternum* | 0 | 0 | 0 | 0 | 0 | 0.00 | NA | | NA | | 2 | 0.39 | 2 | 0.02 | NA | NA |
| Anuran egg | 1 | 0.06 | 565 | 51.74 | 10 | 67.03 | 1.00 | | 712.518\* | | 172 | 33.79 | 7 | 7.26 | 1.00 | 321.342\* |
| Tadpole spec | 81 | 4.7 | 20 | 1.83 | 16 | 100.00 | -0.45 | | -4.323\* | | 48 | 9.43 | 38 | 100.00 | 0.37 | 5.171\* |
| *Xenopus* tadpole | 694 | 40.28 | 0 | 0 | 0 | 0.00 | -1.00 | | -20.867\* | | 3 | 0.59 | 2 | 0.03 | -0.98 | -13.864\* |
| N, total number of individuals obtained; N% percentage of N; Freq, frequency of occurrence; Freq % percentages of frequency of occurrence; *IRI* (%), index of relative importance; *E*\*, Electivity index; *χ2* = Chi-square residuals, significant values are marked with an asterisk. | | | | | | | | | | | | | | | | |

**Table S6:** Prey categories consumed by *Xenopus laevis* and obtained during habitat sampling at the Kleinmond for very large frogs.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Kleinmond**  **>72 mm** | **Environment** | | ***Xenopus laevis*** n = 33 | | | | |  |
| **Order** | Ne | Ne (%) | N | N (%) | Freq | *IRI* (%) | *E*\* | *χ2* |
| Coleoptera | 260 | 15.09 | 19 | 3.86 | 3 | 34.03 | -0.62 | -6.289\* |
| Ephemeroptera | 9 | 0.52 | 0 | 0 | 2 | 0.00 | -1.00 | -1.585\* |
| Heteroptera | 166 | 9.63 | 4 | 0.81 | 3 | 0.99 | -0.85 | -6.220\* |
| Hymenoptera | 1 | 0.06 | 0 | 0 | 1 | 0.00 | -1.00 | -0.528\* |
| Nematocera | 2 | 0.12 | 2 | 0.41 | 1 | 0.15 | 0.56 | 1.929 |
| Amphipoda | 496 | 28.79 | 0 | 0 | 3 | 0.00 | -1.00 | -11.767\* |
| *Daphnia* | 1 | 0.06 | 4 | 0.81 | 1 | 0.31 | 0.87 | 7.042 |
| Acari | 11 | 0.64 | 0 | 0 | 2 | 0.00 | -1.00 | -1.752\* |
| Pseudoscorpiones | 1 | 0.06 | 0 | 0 | 1 | 0.00 | -1.00 | -0.528\* |
| *Cacosternum* | 0 | 0 | 2 | 0.41 | 0 | 12.90 |  | NA |
| Anuran egg | 1 | 0.06 | 399 | 81.1 | 1 | 100.00 | 1.00 | 754.639\* |
| Tadpole spec | 81 | 4.7 | 46 | 9.35 | 2 | 41.00 | 0.36 | 4.918\* |
| *Xenopus* tadpole | 694 | 40.28 | 7 | 1.42 | 3 | 15.97 | -0.96 | -13.416\* |
| N, total number of individuals obtained; N% percentage of N; Freq, frequency of occurrence; Freq % percentages of frequency of occurrence; *IRI* (%), index of relative importance; *E*\*, Electivity index; *χ2* = Chi-square residuals, significant values are marked with an asterisk. | | | | | | | | |