Supplementary Material: Use of the Zygoptera/Anisoptera ratio (Insecta: Odonata) for habitat alteration assessments in Cerrado streams

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## Anisoptera (Libellulidae) assemblage in the Cerrado biome in Mato Grosso (MT), Brazil. Data for the Nova Xavantina and Nova Nazaré streams of the state were adopted from Calvão et al. (2018) and Carvalho et al. (2013), respectively.

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| **Source** | **Stream** | *Diastatops intensa* | *Diastatops obscura* | *Dythemis multipunctata* | *Elasmothemis cannacrioides* | *Erythemis credula* | *Erythrodiplax paraguayensis* | *Erythrodiplax amazonica* | *Erythrodiplax melanica* |
| Carvalho et al. (2013) | Matrichan | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 3 | 20 | 0 | 0 | 0 | 8 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 14 | 0 | 0 | 12 | 1 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 1 | 17 | 0 | 0 | 0 | 1 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 23 | 0 | 0 | 0 | 1 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 7 | 0 | 5 | 0 | 0 | 0 | 0 |

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|  |  | ***Erythrodiplax*** |
| **Source** | **Stream** | *Ery. basalis* | *Ery. avittata* | *Ery. fusca* | *Ery. juliana* | *Ery.latimaculata* | *Ery. maculosa* | *Ery. ochracea* | *Ery. umbrata* |
| Carvalho et al. (2013) | Matrichan | 16 | 1 | 5 | 0 | 0 | 0 | 0 | 1 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 41 | 0 | 0 | 0 | 0 | 4 | 0 | 3 |
| Carvalho et al. (2013) | Marayatobá | 64 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 37 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 23 | 0 | 23 | 0 | 2 | 0 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 12 | 0 | 22 | 0 | 1 | 0 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 4 | 0 | 30 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 39 | 0 | 4 | 2 | 0 | 0 | 1 | 0 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Source** | **Stream** | *Fylgia amazonica* | *Gynothemis pumila* | *Gynothemi* ssp*.* | *Macrothemis hemichlora* | *Macrothemi* ssp*.* | *Miathyria marcella* |
| Carvalho et al. (2013) | Matrichan | 0 | 0 | 2 | 0 | 1 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 1 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 | 6 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 11 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 7 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 1 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 0 | 0 | 0 | 1 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 0 | 0 | 0 | 0 | 0 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Source** | **Stream** | *Micrathyria atra* | *Micrathyria hesperis* | *Micrathyria pirassunungae* | *Micrathyria spuria* | *Micrathyriastawiarskii* | *Nephepeltia phryne* |
| Carvalho et al. (2013) | Matrichan | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 0 | 0 | 0 | 1 | 0 | 1 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 1 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 1 | 0 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 1 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 1 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 0 | 1 | 0 | 5 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 0 | 0 | 3 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 1 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 0 | 0 | 0 | 0 | 0 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Source** | **Stream** | *Oligoclada abbreviata* | *Oligocladapachystigma* | *Oligoclada raineyi* | *Oligoclada walkeri* | *Oligoclada xanthopleura* | *Orthemis ambirufa* | *Orthemis discolor* | *Orthemi* ssp. |
| Carvalho et al. (2013) | Matrichan | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 2 | 0 | 0 | 0 | 2 | 0 | 1 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 1 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 0 | 0 | 0 | 0 | 6 | 0 | 1 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 0 | 3 | 0 | 0 | 0 | 2 | 0 |
| Calvão et al. (2018) | Esperança | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Source** | **Stream** | *Perithemis electra* | *Perithemis lais* | *Perithemis tenera* | *Perithemis thais* | *Planiplax phoenicura* | *Planiplax* sp. | *Uracis reducta* | *Uracis siemensi* | *Zenithoptera viola* |
| Carvalho et al. (2013) | Matrichan | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 0 | 28 | 3 | 0 | 2 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 1 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Zygoptera assemblage in the Cerrado biome in Mato Grosso (MT), Brazil. Data for the Nova Xavantina and Nova Nazaré streams of the State were adopted from Calvão et al. (2018) and Carvalho et al. (2013), respectively.

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|  |  | **Calopterygidae** |
| **Source** | **Stream** | *Hetaerinaauripennis* | *Hetaerina curvicauda* | *Hetaerina laesa* | *Hetaerina rosea* | *Hetaerina westfalli* | *Mnesareteguttifera* | *Mnesarete lencioni* | *Mnesarete williamsoni* |
| Carvalho et al. (2013) | Matrichan | 0 | 13 | 0 | 2 | 0 | 0 | 2 | 1 |
| Carvalho et al. (2013) | Tritopá | 0 | 20 | 0 | 3 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca  | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 5 | 0 | 0 | 12 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 9 | 1 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 0 | 1 | 11 | 4 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 3 | 3 | 8 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 2 | 1 | 0 | 17 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 1 | 0 | 0 | 4 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 2 | 0 | 6 | 0 | 0 | 0 | 0 |

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|  |  | **Coenagrionidae (*Acanthagrion*)** |
| **Source** | **Stream** | *Aca. abunae* | *Aca. apicale* | *Aca. ascendens* | *Aca. chacoense* | *Aca. gracile* | *Aca .jessei* | *Aca. minutum* | *Aca.* sp1 | *Aca. temporale* | *Aca. truncatum* |
| Carvalho et al. (2013) | Matrichan | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 5 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Calvão et al. (2018) | Sucuri | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 0 | 0 | 0 | 1 | 9 | 0 | 9 | 0 | 1 | 53 |
| Calvão et al. (2018) | Caveira | 0 | 0 | 0 | 0 | 41 | 0 | 0 | 0 | 0 | 33 |
| Calvão et al. (2018) | Esperança | 0 | 0 | 11 | 0 | 43 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 22 |

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|  |  | **Coenagrionidae** |
| **Source** | **Stream** | *Aeolagrion flammeum* | *Argia chapadae* | *Argia hasemani* | *Argia lilacina* | *Argia mollis* | *Argia reclusa* | *Argia smithiana* | *Argia subapicalis* | *Argiatinc tipennis* |
| Carvalho et al. (2013) | Matrichan | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 3 | 0 | 0 | 0 | 15 | 15 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 2 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 0 | 6 | 5 | 12 | 2 | 1 | 19 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 1 | 0 | 5 | 6 | 23 | 0 | 47 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 1 | 25 | 2 | 1 | 3 | 15 |
| Calvão et al. (2018) | Sucuri | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 0 | 21 |
| Calvão et al. (2018) | Buritizinho | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 0 | 0 | 0 | 0 | 0 | 8 | 2 | 0 | 2 |
| Calvão et al. (2018) | Murtinho | 0 | 0 | 0 | 23 | 0 | 5 | 0 | 0 | 0 |

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|  |  | **Coenagrionidae** |
| **Source** | **Stream** | *Oxyagrionchapadense* | *Oxyagrionfernandoi* | *Oxyagrion sulmatogrossense* | *Peristictaaenoviridis* | *Protoneura tenuis* | *Telebasiscoccinea* | *Telebasis gigantea* |
| Carvalho et al. (2013) | Matrichan | 0 | 0 | 0 | 5 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 2 | 0 | 1 | 0 | 1 | 0 | 3 |
| Calvão et al. (2018) | Chupador | 1 | 0 | 0 | 0 | 2 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 0 | 8 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 0 | 0 | 0 | 0 | 0 | 1 | 0 |

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|  |  | **Coenagrionidae** | **Dicteriaridae** | **Perilestidae** | **Polythoridae** |
| **Source** | **Stream** | *Tigriagrion aurantinigrum* | *Tuberculobasis inversa* | *Heliocharis amazona* | *Perilestes solutus* | *Chalcopteryx rutilans* |
| Carvalho et al. (2013) | Matrichan | 9 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Tritopá | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Paca | 6 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Cigano | 2 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 1 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 1 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 0 | 2 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 8 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Caveira | 16 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Esperança | 7 | 0 | 0 | 3 | 0 |
| Calvão et al. (2018) | Murtinho | 12 | 1 | 1 | 0 | 0 |

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| --- | --- | --- |
|  |  | **Coenagrionidae** |
| **Source** | **Stream** | *Cyanallagma ferenigrum* | *Epipleoneura machadoi* | *Epipleoneura metallica* | *Helveciagrion obsoletum* | *Homeoura nepos* | *Ischnuracapreolus* | *Ischnura fluviatilis* | *Neoneura sylvatica* |
| Carvalho et al. (2013) | Matrichan | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 3 |
| Carvalho et al. (2013) | Tritopá | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 |
| Carvalho et al. (2013) | Paca | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Carvalho et al. (2013) | Marayatobá | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Areia Branca | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | ÁguaLimpa | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Estrela | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 3 |
| Carvalho et al. (2013) | Cigano | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Boa Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Carvalho et al. (2013) | Goiás | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buriti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Chupador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Calvão et al. (2018) | Duilio | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Sucuri | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Buritizinho | 5 | 0 | 0 | 0 | 8 | 19 | 2 | 8 |
| Calvão et al. (2018) | Caveira | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Calvão et al. (2018) | Esperança | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calvão et al. (2018) | Murtinho | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 13 |

## Habitat Integrity Index of the streams sampled in the Cerrado biome in Mato Grosso (MT), Brazil. Data for the Nova Xavantina and Nova Nazaré streams of the state were adopted from Calvão et al. (2018) and Carvalho et al. (2013), respectively.

|  |  |  |
| --- | --- | --- |
| **Source** | **Stream** | **Habitat Integrity Index** |
| Carvalho et al. (2013) | Matrichan | 0.664 |
| Carvalho et al. (2013) | Tritopá | 0.774 |
| Carvalho et al. (2013) | Paca | 0.264 |
| Carvalho et al. (2013) | Marayatobá | 0.293 |
| Carvalho et al. (2013) | Areia Branca | 0.306 |
| Carvalho et al. (2013) | ÁguaLimpa | 0.701 |
| Carvalho et al. (2013) | Estrela | 0.685 |
| Carvalho et al. (2013) | Cigano | 0.807 |
| Carvalho et al. (2013) | Boa Esperança | 0.838 |
| Carvalho et al. (2013) | Goiás | 0.596 |
| Calvão et al. (2018) | Buriti | 0.963 |
| Calvão et al. (2018) | Chupador | 0.963 |
| Calvão et al. (2018) | Duilio | 0.963 |
| Calvão et al. (2018) | Sucuri | 0.879 |
| Calvão et al. (2018) | Buritizinho | 0.118 |
| Calvão et al. (2018) | Caveira | 0.125 |
| Calvão et al. (2018) | Esperança | 0.339 |
| Calvão et al. (2018) | Murtinho | 0.360 |

1. **Beta regression models describing the influence of the habitat integrity (as habitat integrity index, HII) on the proportion of Anisoptera in the Cerrado biome, Brazil. SE: standard error; R2: Nagelkerke's R2; Statistically significant effects (p<0.05) in bold.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Ratio** | **Metric** | **Estimate** | **SE** | **z-value** | **p-value** | **R2** |
| Anisoptera ratio | Richness | 2.348 | 0.574 | 4.091 | **<0.001** | 0.488 |
| Abundance | -3.175 | 0.902 | 3.519 | **<0.001** | 0.407 |

## Goodness of fit of the models that evaluate the influence of the state of habitat on the Zygoptera/Anisoptera ratio in the Cerrado biome in Mato Grosso (MT), Brazil.

## Influence of habitat integrity on the proportion of Zygoptera richness



## b) Influence of habitat integrity on the proportion of Anisoptera richness



## c) Influence of habitat integrity on the proportion of Zygoptera abundance



## d) Influence of habitat integrity on the proportion of Anisoptera abundance.

