|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table Sx**. Model selection for zooplankton (Daphniidae, Copepoda) and mosquito (*Culex* spp.) with candidate GAM models\* assessed at four time points post addition of burned or unburned plant material to experimental mesocosms. | | | | | |
| *Taxa* | *Time* | *Model* | *df* | *AIC* | *ΔAIC* |
| Daphniidae | Day-10 | ~Treatment + s(plant material, by= Treatment) | 5.0 | 231.9 |  |
|  |  | ~Treatment + s(plant material) | 4.0 | 231.0 |  |
|  |  | ~s(plant material) | 3.0 | **229.6** | 0.0 |
|  | Day-31 | ~Treatment + s(plant material, by= Treatment) | 9.6 | 256.6 |  |
|  |  | ~Treatment + s(plant material) | 6.4 | 257.5 |  |
|  |  | ~s(plant material) | 5.5 | **255.6** | 0.0 |
|  | Day-59 | ~Treatment + s(plant material, by= Treatment) | 6.8 | **162.5** | -9.3 |
|  |  | ~Treatment + s(plant material) | 5.2 | 163.9 |  |
|  |  | ~s(plant material) | 3.8 | 171.7 |  |
|  | Day-89 | ~Treatment + s(plant material, by= Treatment) | 7.1 | 272.7 |  |
|  |  | ~Treatment + s(plant material) | 5.7 | 269.4 |  |
|  |  | ~s(plant material) | 4.7 | **267.7** | 0.0 |
|  |  |  |  |  |  |
| Copepoda | Day-10 | ~Treatment + s(plant material, by= Treatment) | 6.4 | 170.2 |  |
|  |  | ~Treatment + s(plant material) | 5.1 | 170.3 |  |
|  |  | ~s(plant material) | 4.2 | **168.3** | 0.0 |
|  | Day-31 | ~Treatment + s(plant material, by= Treatment) | 11.1 | **159.6** | -9.7 |
|  |  | ~Treatment + s(plant material) | 7.7 | 168.4 |  |
|  |  | ~s(plant material) | 6.6 | 169.4 |  |
|  | Day-59 | ~Treatment + s(plant material, by= Treatment) | 8.0 | 181.1 |  |
|  |  | ~Treatment + s(plant material) | 4.0 | 181.1 |  |
|  |  | ~s(plant material) | 3.0 | **180.2** | 0.0 |
|  | Day-89 | ~Treatment + s(plant material, by= Treatment) | 5.0 | 157.5 |  |
|  |  | ~Treatment + s(plant material) | 4.0 | 155.6 |  |
|  |  | ~s(plant material) | 3.0 | **153.6** | 0.0 |
|  |  |  |  |  |  |
| Mosquito | Day-10 | ~Treatment + s(plant material, by= Treatment) | 8.7 | **116.8** | -57.7 |
|  |  | ~Treatment + s(plant material) | 6.0 | 173.8 |  |
|  |  | ~s(plant material) | 4.9 | 174.5 |  |
|  | Day-31 | ~Treatment + s(plant material, by= Treatment) | 10.9 | **172.9** | -18.3 |
|  |  | ~Treatment + s(plant material) | 4.6 | 190.5 |  |
|  |  | ~s(plant material) | 3.5 | 191.2 |  |
|  | Day-59 | ~Treatment + s(plant material, by= Treatment) | 17.8 | **53.2** | -99.2 |
|  |  | ~Treatment + s(plant material) | 5.8 | 152.9 |  |
|  |  | ~s(plant material) | 4.8 | 152.5 |  |
|  | Day-89 | ~Treatment + s(plant material, by= Treatment) | 5.0 | **86.4** | -5.3 |
|  |  | ~Treatment + s(plant material) | 4.0 | 92.3 |  |
|  |  | ~s(plant material) | 3.0 | 91.6 |  |
| *\*Treatment +* *s(plant material, by= Treatment)* GAM has parametric terms (*Treatment*) and separate smoothers for each treatment. *Treatment + s(plant material)* GAM has a global smoother allowing for off-set intercepts according to treatments. The *s(plant material)* GAM fits a global smoother to all data. *Bold* represents the selected models. Delta AIC (*ΔAIC*) is the difference between the selected model and the global smoother model | | | | | | |
|  | | | | | | |