|  |  |  |  |  |  |
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| **Table S10**. Model selection using plankton of two size classes (< 63 and >63 μm) and measuring the trophic transfer efficiency (percent of 15N-labeled sage) in plankton biomass determined using a two-member mixing model, their stable isotope values (δ15N), and carbon:nitrogen (C:N) ratios. Candidate GAM models\* were assessed in two each time points post addition of burned or unburned plant material to experimental mesocosms. | | | | | |
| *Metric* | *Time* | *Model* | *df* | *AIC* | *ΔAIC* | |
| % sage-15N | Day-10 | Treatment + Type + s(plant material, by=Treatment) | 12.9 | **354.1** | -26.7 | |
|  |  | Treatment + Type + s(plant material) | 8.7 | 359.8 |  | |
|  |  | s(plant material) | 6.0 | 380.8 |  | |
|  | Day-31 | Treatment + Type + s(plant material, by=Treatment) | 12.8 | **367.5** | -24.1 | |
|  |  | Treatment + Type + s(plant material) | 8.2 | 385.6 |  | |
|  |  | s(plant material) | 6.1 | 391.6 |  | |
|  |  |  |  |  |  | |
| δ15N | Day-10 | Treatment + Type + s(plant material, by=Treatment) | 12.9 | **479.4** | -26.7 | |
|  |  | Treatment + Type + s(plant material) | 8.7 | 485.1 |  | |
|  |  | s(plant material) | 6.0 | 506.1 |  | |
|  | Day-31 | Treatment + Type + s(plant material, by=Treatment) | 12.8 | **492.7** | -24.1 | |
|  |  | Treatment + Type + s(plant material) | 8.2 | 510.8 |  | |
|  |  | s(plant material) | 6.1 | 516.8 |  | |
|  |  |  |  |  |  | |
| C:N | Day-10 | Treatment + Type + s(plant material, by=Treatment) | 8.1 | **287.0** | -2.9 | |
|  |  | Treatment + Type + s(plant material) | 7.0 | 291.3 |  | |
|  |  | s(plant material) | 5.0 | 289.9 |  | |
|  | Day-31 | Treatment + Type + s(plant material, by=Treatment) | 12.6 | **223.7** | -59.9 | |
|  |  | Treatment + Type + s(plant material) | 8.4 | 261.2 |  | |
|  |  | s(plant material) | 6.0 | 283.6 |  | |
| *\** *Treatment + Type* represent parametric terms that provide offsets for either separate smoothers for each treatment *s(plant material, by=Treatment* or global smoothers *s(plant material). Bold* represents the selected models. Delta AIC (*ΔAIC*) is the difference between the selected model and the global smoother model | | | | | |
|  | | | | | |