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| --- | --- | --- | --- | --- | --- | --- |
| **Table Sx**. Model selection for flow cytometry-determined cell abundance for autofluorescent cells and total microbial cells (measured by Syber Green) with candidate GAM models\* assessed at three time points post addition of burned or unburned plant material to experimental mesocosms. | | | | | | |
| *Metric* | | *Time* | *Model* | *df* | *AIC* | *ΔAIC* |
| Autofluorescent cells | | Day-10 | ~Treatment + s(plant material, by= Treatment) | 5.0 | 910.4 |  |
|  | |  | ~Treatment + s(plant material) | 4.0 | 908.6 |  |
|  | |  | ~s(plant material) | 3.0 | **907.0** | 0.0 |
|  | | Day-59 | ~Treatment + s(plant material, by= Treatment) | 5.8 | 818.9 |  |
|  | |  | ~Treatment + s(plant material) | 4.9 | 818.3 |  |
|  | |  | ~s(plant material) | 3.6 | **818.2** | 0.0 |
|  | | Day-89 | ~Treatment + s(plant material, by= Treatment) | 7.5 | **961.2** | -0.2 |
|  | |  | ~Treatment + s(plant material) | 4.0 | 962.0 |  |
|  | |  | ~s(plant material) | 3.0 | 961.4 |  |
|  | |  |  |  |  |  |
| Total microbial cells | | Day-10 | ~Treatment + s(plant material, by= Treatment) | 10.2 | 1017.6 |  |
|  | |  | ~Treatment + s(plant material) | 7.5 | 1011.3 |  |
|  | |  | ~s(plant material) | 6.5 | **1010.2** | 0.0 |
|  | | Day-59 | ~Treatment + s(plant material, by= Treatment) | 5.1 | 926.5 |  |
|  | |  | ~Treatment + s(plant material) | 4.0 | 925.5 |  |
|  | |  | ~s(plant material) | 3.0 | **923.8** | 0.0 |
|  | | Day-89 | ~Treatment + s(plant material, by= Treatment) | 5.0 | **979.1** | -19.0 |
|  | |  | ~Treatment + s(plant material) | 4.0 | 998.9 |  |
|  | |  | ~s(plant material) | 3.0 | 998.1 |  |
| *\*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 | | | | | | |
|  | | | | | |