|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S6**. Generalized additive models (GAM) testing treatment (burned vs. unburned) and factor-smooth interaction effects on dissolved oxygen measured at dawn, dusk, and dawn over a 24 h period. Separate smoothers were fit for burned and unburned data, and anova tables were generated by *anova.gam*(). | | | | | | | |
| **Dissolved oxygen (% O2)** | | |  | |  |  |  |
|  | | *Effect* | | *df /edf* | *Ref.df* | *F* | *p-value* |
| Day-10 | dawn-1 | Treatment | | 1 | – | 5.467 | **0.028** |
|  |  | s(plant material) | | 3.516 | 4.287 | 127.7 | **<0.001** |
|  | dusk-1 | Treatment | | 1 | – | 4.718 | **0.040** |
|  |  | s(plant material) | | 3.225 | 3.942 | 73.89 | **<0.001** |
|  | dawn-2 | Treatment | | 1 | – | 6.333 | **0.019** |
|  |  | s(plant material) | | 3.481 | 4.245 | 114.0 | **<0.001** |
|  |  |  | |  |  |  |  |
| Day-31 | dawn-1 | Treatment | | 1 | – | 0.309 | 0.584 |
|  |  | s(plant material) : burned | | 1.844 | 2.282 | 32.91 | **<0.001** |
|  |  | s(plant material) : unburned | | 2.508 | 3.083 | 14.25 | **<0.001** |
|  | dusk-1 | Treatment | | 1 | – | 1.887 | 0.182 |
|  |  | s(plant material) : burned | | 2.026 | 2.503 | 25.65 | **<0.001** |
|  |  | s(plant material) : unburned | | 2.190 | 2.699 | 10.07 | **<0.001** |
|  | dawn-2 | Treatment | | 1 | – | 0.744 | 0.397 |
|  |  | s(plant material) : burned | | 2.289 | 2.818 | 27.35 | **<0.001** |
|  |  | s(plant material) : unburned | | 2.411 | 2.966 | 10.64 | **<0.001** |
|  |  |  | |  |  |  |  |
| Day-59 | dawn-1 | Treatment | | 1 | – | 1.656 | 0.212 |
|  |  | s(plant material) : burned | | 4.970 | 5.958 | 23.28 | **<0.001** |
|  |  | s(plant material) : unburned | | 1.000 | 1.000 | 52.88 | **<0.001** |
|  | dusk-1 | Treatment | | 1 | – | 6.275 | **0.021** |
|  |  | s(plant material) : burned | | 5.038 | 6033 | 24.8 | **<0.001** |
|  |  | s(plant material) : unburned | | 2.753 | 3.377 | 14.67 | **<0.001** |
|  | dawn-2 | Treatment | | 1 | – | 3.860 | **0.062** |
|  |  | s(plant material) : burned | | 5.166 | 6.175 | 22.80 | **<0.001** |
|  |  | s(plant material) : unburned | | 1.000 | 1.000 | 38.78 | **<0.001** |
|  |  |  | |  |  |  |  |
| Day-89 | dawn-1 | s(plant material) | | 1.667 | 2.061 | 9.333 | **<0.001** |
|  | dusk-1 | Treatment | | 1 | – | 0.506 | 0.483 |
|  |  | s(plant material) : burned | | 2.575 | 3.163 | 5.636 | **0.004** |
|  |  | s(plant material) : unburned | | 1.000 | 1.000 | 2.538 | 0.124 |
|  | dawn-2 | s(plant material) | | 1.041 | 1.081 | 15.09 | **<0.001** |
| *Treatment* indicates the parametric term in GAM, *s(plant material)* is the smooth term for either burned or unburned treatments. *df* = degrees of freedom for parametric terms; *edf* = effective degrees of freedom for smoother terms; *Ref.df* = reference degree of freedom, where dashes indicate NA for parametric terms. Significant effects (p<0.05) are in bold. | | | | | | | |