**Appendix**

Chart, box and whisker chart

Description automatically generated

Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of each variable along with 95% confidence intervals from the top performing models. Analysis incorporated derived fuel loads at different strata in small (0.0625 ha) plots and large (4 ha) plots with respect to fencing treatment (open/partial/closed), year (2018/19/20), fire treatment (burnt/unburnt) and block (A/B/C/D). Strata levels are surface, near-surface, elevated and total fuel loads (t ha-1). Reference states for comparison were ‘Open’ plots in ‘2018’ (additionally, ‘Unburnt’ for small plots). Fuel loads were derived from assessment following Hines et al. (2010). Confidence intervals that do not cross the red line denotes statistically significant variables.

Chart, box and whisker chart

Description automatically generated

Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height, rate of fire spread and fireline intensity calculated using the Forest Fire Danger Meter (FFDM) in small (0.0625 ha) plots and large (4 ha) plots with respect to fencing treatment (open/partial/closed), year (2018/19/20), fire treatment (burnt/unburnt) and block (A/B/C/D). Reference states for comparison were ‘Open’ plots in ‘2018’ (additionally, ‘Unburnt’ for small plots). Weather scenarios described in Table 3. Confidence intervals that do not cross the red line denotes statistically significant variables.

Chart, line chart, box and whisker chart

Description automatically generated

Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height, rate of fire spread and fireline intensity calculated using the Vesta Mk 2 in small (0.0625 ha) plots and large (4 ha) plots with respect to fencing treatment (open/partial/closed), year (2018/19/20), fire treatment (burnt/unburnt) and block (A/B/C/D). Reference states for comparison were ‘Open’ plots in ‘2018’ (additionally, ‘Unburnt’ for small plots). Weather scenarios described in Table 3. Confidence intervals that do not cross the red line denotes statistically significant variables.

Chart

Description automatically generated

Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height, rate of fire spread and fireline intensity calculated using the Fire Research and Modelling Environment (FRaME) in small (0.0625 ha) plots and large (4 ha) plots with respect to fencing treatment (open/partial/closed), year (2018/19/20), fire treatment (burnt/unburnt) and block (A/B/C/D). Reference states for comparison were ‘Open’ plots in ‘2018’ (additionally, ‘Unburnt’ for small plots). Weather scenarios are described in Table 3 of the manuscript. Confidence intervals that do not cross the red line denotes statistically significant variables.



Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour predictions under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height (A & B), rate of fire spread (C & D) and fireline intensity (E & F) calculated using the Forest Fire Danger Meter (FFDM) in small (0.0625 ha) plots with respect to fencing treatment (A, C & E) and time since fire (B, D & F). Weather scenarios are described in Table 3 of the manuscript. Letters above confidence intervals indicate significant differences for the summer average (SuAv) weather conditions (see Table 3). Horizontal lines indicate maximum threshold levels of fire management responses employed via direct (dotted), parallel (dot-dash) and indirect (dashed) methods.



Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour predictions under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height (A & B), rate of fire spread (C & D) and fireline intensity (E & F) calculated using the Forest Fire Danger Meter (FFDM) in large (4 ha) plots with respect to fencing treatment (A, C & E) and time since fire (B, D & F). Weather scenarios are described in Table 3 of the manuscript. Letters above confidence intervals indicate significant differences for the summer average (SuAv) weather conditions (see Table 3). Horizontal lines indicate maximum threshold levels of fire management responses employed via direct (dotted), parallel (dot-dash) and indirect (dashed) methods.

Diagram

Description automatically generated with low confidence

Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour predictions under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height (A & B), rate of fire spread (C & D) and fireline intensity (E & F) calculated using the Vesta Mk 2 in small (0.0625 ha) plots with respect to fencing treatment (A, C & E) and time since fire (B, D & F). Weather scenarios are described in Table 3 of the manuscript. Letters above confidence intervals indicate significant differences for the summer average (SuAv) weather conditions (see Table 3). Horizontal lines indicate maximum threshold levels of fire management responses employed via direct (dotted), parallel (dot-dash) and indirect (dashed) methods.

Diagram

Description automatically generated

Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour predictions under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height (A & B), rate of fire spread (C & D) and fireline intensity (E & F) calculated using Vesta Mk 2 in large (4 ha) plots with respect to fencing treatment (A, C & E) and time since fire (B, D & F). Weather scenarios are described in Table 3 of the manuscript. Letters above confidence intervals indicate significant differences for the summer average (SuAv) weather conditions (see Table 3). Horizontal lines indicate maximum threshold levels of fire management responses employed via direct (dotted), parallel (dot-dash) and indirect (dashed) methods.



Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour predictions under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height (A & B), rate of fire spread (C & D) and fireline intensity (E & F) calculated using the Fire Research and Modelling Environment (FRaME) in small (0.0625 ha) plots with respect to fencing treatment (A, C & E) and time since fire (B, D & F). Weather scenarios are described in Table 3 of the manuscript. Letters above confidence intervals indicate significant differences for the summer average (SuAv) weather conditions (see Table 3). Horizontal lines indicate maximum threshold levels of fire management responses employed via direct (dotted), parallel (dot-dash) and indirect (dashed) methods.



Figure S : Effect sizes of the generalized linear mixed model (GLMM) showing estimates of fire behaviour predictions under four differing weather scenarios along with 95% confidence intervals from the top performing models. Analysis incorporated flame height (A & B), rate of fire spread (C & D) and fireline intensity (E & F) calculated using the Fire Research and Modelling Environment (FRaME) in large (4 ha) plots with respect to fencing treatment (A, C & E) and time since fire (B, D & F). Weather scenarios are described in Table 3 of the manuscript. Letters above confidence intervals indicate significant differences for the summer average (SuAv) weather conditions (see Table 3). Horizontal lines indicate maximum threshold levels of fire management responses employed via direct (dotted), parallel (dot-dash) and indirect (dashed) methods.

Table S 1: List of input variables, symbols, units and source. BOM denotes the Australian Bureau of Meteorology.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **Symbol** | **Units** | **Source** | **Notes** |
| **Forest Fire Danger Meter (FFDM) Mk 5** | | | | |
| Temperature  Humidity  Wind speed  Drought factor  Slope  Total fuel load | T  H  U10  DF  θ  WT | °C  %  km hr-1  °  t ha-1 | BOM  BOM  BOM  BOM  Field | measured 10 m above ground  kept constant at 0° |
| **Vesta Mk 2** | | | | |
| Wind speed  Wind adjustment factor  Dead fuel moisture content  Drought factor  Slope  Surface fine litter load  Understorey fuel height  Total fuel load | U10  WAF  MC  DF  θ  WS  HU  WT | km hr-1  °  t ha-1  m  t ha-1 | BOM  Cruz (2021)  BOM  BOM  Field  Field  Field | measured 10 m above ground  kept constant at 3.4  kept constant at 0° |
| **Fire Research and Modelling Environment (FRaME)** | | | | |
| Temperature  Humidity  Wind speed  Dead fuel moisture content  Slope  Total fuel load  Fuel load - surface  Diameter of surface fuel  Fire line  Separation – near-surface  Separation – elevated  Separation – midstory  Separation – canopy  Overlap – near-surface/elevated  Overlap – near-surface/midstory  Overlap – elevated/midstory  Overlap – elevated/canopy  Overlap – midstory/canopy  Species identification  Species – moisture of live leaves  Stratum level  Count of species  Base height  Lower edge height  Upper edge height  Top height  Width  Openness  Clumping  Proportion of dead foliage  Leaf form  Leaf thickness  Leaf width  Leaf length  Leaf separation  Stem order  Ignition temperature | T  H  U10  MC  θ  WT | °C  %  km hr-1  °  t ha-1  t ha-1  m  m  m  m  m  m  m  m  m  m  m  m  m  m  m  °C | BOM  BOM  BOM  BOM  Field  Field  Field  Field  Field  Field  Field  Field  Field  Field  Field  Field  Field  Field  Database  Field  Field  Field  Field  Field  Field  Field  Database  Database  Field  Field  Field  Database  Database  Database  Field  Database | measured 10m above ground  kept constant at 0°  proportion oven dry weight  mean value  distance between plants  distance between plants  distance between plants  distance between plants  overlap between strata  overlap between strata  overlap between strata  overlap between strata  overlap between strata  proportion oven dry weight  1 (near-surface) to 4 (canopy)  Height to base of crown  Height to lower edge of crown  Height to upper edge of crown  Height to top of crown  Width of crown  Ratio of clumps to clump diameter  Ratio of clump to crown volume  flat or round |

Table S 2: Equations for predicting fire behaviour for each model and where each equation was sourced. Note that some equations were modified to allow consistency of units across the three fire models.

|  |  |
| --- | --- |
| **Models and Equations** | **Source** |
| **Forest Fire Danger Meter (FFDM) Mk 5**  FFDI = 2 · EXP(-0.450 + 0.987 · lnD – 0.0345 · H + 0.0234 · U10)  R = 0.0012 · FFDI · W  Hf = 13.0 · R + 0.24 · W - 2.0  I = HY · (W / 10) · (R / 3.6) | **McArthur 1973**  Noble et al. 1980  Noble et al. 1980  Noble et al. 1980  Byram 1959 |
| **Vesta Mk 2**  U2 = U10 / WAF  1 *if MC ≤ 4.1%*  ΦMd = 0.9082 + 0.1206 · MC – 0.02106 · MC2 + *if 4.1% < MC ≤ 24%*  0.001853 · MC3 – 0.00003467 · MC4,  0, *if MC > 24%*  ΦFA = 1.008 / (1 + 104.9 · EXP(-0.9306 · DF))  ΦM = ΦMd · ΦFA  g(x1) = -23.9315 + 1.7033 · U2 + 12.0822 · ΦM + 0.95236 · (Ws + W­ns)  P(ll) = 0, *if* (Ws + W­ns) *< 1.0 t ha-1*  1 / (1 + EXP(-g(x1))) *if* (Ws + W­ns) *≥ 1.0 t ha-1*  g(x2) = -32.3074 + 0.2951 · U10 + 26.8734 · ΦM  P(lll) = 0, *if R(ll) < 0.3 km h-1*  1 / (1 + EXP(-g(x2))) *if R(ll) ≥ 0.3 km h-1*  R(l) = (0.03 + 0.05024 · (U2 – 1)0.92628 · ((Ws + W­ns) / 10)0.79928) · ΦM  R(ll) = 0.19591 · (U2)0.8257 · ((Ws + W­ns) / 10)0.4672· hu0.495 · ΦM  R(lll) = 0.05235 · (U10)1.19128 · ΦM  R = R(l) · (1 – P(ll)) + R(ll) · P(ll) *if P(ll) < 0.5*  (R(l) · (1 – P(ll)) + R(ll) · P(ll)) · (1 – P(lll)) + R(lll) ·P(lll) *if P(ll) ≥ 0.5*  Hf = (0.0193 · R0.723·EXP(0.0064·He)) · B  I = HY · (W / 10) · (R / 3.6) | **Cruz 2021**  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cruz 2021  Cheney *et al*. 2012  Byram 1959 |
| **Fire Research and Modelling Environment (FRaME)**  I = HY · (W / 10) · (R / 3.6) | **Zylstra 2011**  Byram 1959 |
| B, DEFFM bias correction factor (1.07); D, drought factor; FFDI, Forest Fire Danger Index; ΦFA, fuel availability function; g(x1and2), H, humidity (%); He, height of elevated fuel (cm); Hf, flame height (m); HY, heat yield (kJ kg-1); I, fireline intensity (kW m-1); MC, moisture content (% oven dry weight); Mf, DEFFM fuel moisture function (% oven dry weight); ΦM, fuel moisture effect; ΦMd, fine dead fuel moisture content effect; P(ll and lll), probability of a fire spread phase (ll and lll) to occur; R, forward rate of fire spread (km hr-1); R(l, ll and lll), rate of fire spread for the respective phase; T, temperature (°C); U2, 2 m understory windspeed (km hr-1); U10, 10 m open windspeed (km hr-1); W, total fuel load (t ha-1); W­ns, near-surface fuel load (t ha-1); W­­S, surface fuel load (t ha-1); WAF, wind adjustment factor (3.4). Note: as slope was kept constant across plots, we did not include the slope calculations. | |

Table S : Model selection and descriptions of the nine generalized linear mixed models (GLMM) analysed for derived fuel loads in small (0.0625 ha) plots. Models in bold indicate the most parsimonious model selected by the least degrees of freedom and delta AICc < 2. Model descriptions relate to the fencing treatment (Herbivory – open, partial, or closed), time since fire (TSF – 1, 2 or 3 years) and previous prescribed burn treatment (Fire – burnt or unburnt).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **strata** | **model** | **model description** | **DF** | **ΔAICc** |
| surface | 1 | **Herbivory+Fire+TSF** | 10 | 0 |
|  | 2 | Herbivory+Fire+TSF + Herbivory:Fire | 12 | 1.092591 |
|  | 3 | Herbivory+Fire+TSF + Fire:TSF | 12 | 4.532172 |
|  | 5 | Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF | 14 | 6.08025 |
|  | 4 | Herbivory+Fire+TSF + Herbivory:TSF | 14 | 7.121651 |
|  | 6 | Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF | 16 | 8.918958 |
|  | 7 | Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF | 16 | 12.836408 |
|  | 8 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF | 18 | 15.267144 |
|  | 9 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF | 22 | 33.784203 |
| near-surface | 1 | **Herbivory+Fire+TSF** | 10 | 0 |
|  | 2 | Herbivory+Fire+TSF + Herbivory:Fire | 12 | 5.968351 |
|  | 3 | Herbivory+Fire+TSF + Fire:TSF | 12 | 5.968351 |
|  | 4 | Herbivory+Fire+TSF + Herbivory:TSF | 14 | 10.051617 |
|  | 5 | Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF | 14 | 12.597544 |
|  | 6 | Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF | 16 | 17.423559 |
|  | 7 | Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF | 16 | 17.423559 |
|  | 8 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF | 18 | 25.696283 |
|  | 9 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF | 22 | 44.464384 |
| Elevated | 1 | **Herbivory+Fire+TSF** | 10 | 0 |
|  | 2 | Herbivory+Fire+TSF + Herbivory:Fire | 12 | 4.139186 |
|  | 3 | Herbivory+Fire+TSF + Fire:TSF | 12 | 4.22506 |
|  | 4 | Herbivory+Fire+TSF + Herbivory:TSF | 14 | 8.596629 |
|  | 5 | Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF | 14 | 8.926905 |
|  | 6 | Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF | 16 | 13.939084 |
|  | 7 | Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF | 16 | 14.018467 |
|  | 8 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF | 18 | 20.157207 |
|  | 9 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF | 22 | 41.060127 |
| Total fuel load | 1 | **Herbivory+Fire+TSF** | 10 | 0 |
|  | 2 | Herbivory+Fire+TSF + Herbivory:Fire | 12 | 2.978196 |
|  | 3 | Herbivory+Fire+TSF + Fire:TSF | 12 | 6.406826 |
|  | 5 | Herbivory+Fire+TSF + Herbivory:TSF | 14 | 10.045187 |
|  | 4 | Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF | 14 | 10.045187 |
|  | 6 | Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF | 16 | 14.211832 |
|  | 7 | Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF | 16 | 17.886016 |
|  | 8 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF | 18 | 22.952645 |
|  | 9 | Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF | 22 | 42.028737 |

Table S : Model selection and descriptions of the nine generalized linear mixed models (GLMM) analysed for derived fuel loads in large (4 ha) plots. Models in bold indicate the most parsimonious model selected by the least degrees of freedom (df) and delta AICc < 2. Model descriptions relate to the fencing treatment (Herbivory – open, partial, or closed) and time since fire (TSF – 1, 2 or 3 years).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **strata** | **model** | **model description** | **DF** | **ΔAICc** |
| surface | 1 | **Herbivory+TSF** | 9 | 0 |
|  | 2 | Herbivory+TSF + Herbivory:TSF | 11 | 12.80108 |
| near-surface | 1 | **Herbivory+TSF** | 9 | 0 |
|  | 2 | Herbivory+TSF + Herbivory:TSF | 11 | 10.7104 |
| elevated | 1 | **Herbivory+TSF** | 9 | 0 |
|  | 2 | Herbivory+TSF + Herbivory:TSF | 11 | 13.02747 |
| total fuel load | 1 | **Herbivory+TSF** | 9 | 0 |
|  | 2 | Herbivory+TSF + Herbivory:TSF | 11 | 12.62288 |

Table S : Model selection and descriptions of the nine generalized linear mixed models (GLMM) analysed for projected fire behaviour outputs of flame height, rate of spread and fireline intensity in small (0.0625 ha) plots produced from three fire prediction models and four weather scenarios. Fire prediction models include the Forest Fire Danger Meter (FFDM), Vesta Mk 2 and the Fire Research and Modelling Environment (FRaME). Weather scenarios are described in Table 3 of the manuscript. Models in bold indicate the most parsimonious model selected by the least degrees of freedom and delta AICc < 2. Model descriptions relate to the fencing treatment (Herbivory – open, partial, or closed), time since fire (TSF – 1, 2 or 3 years) and previous prescribed burn treatment (Fire – burnt or unburnt).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fire Model | Weather Scenario | Model No. | Model Description | DF | ΔAICc |
| Flame Height | | | | | |
| FFDM | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
| Vesta Mk 2 | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 4.64 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.63 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 8.17 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.95 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.26 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 15.10 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.10 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 35.96 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 4.21 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 4.51 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 8.07 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 9.40 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 13.67 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 13.73 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 20.24 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 36.41 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 4.64 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.63 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 8.17 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.95 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.26 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 15.10 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.10 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 35.96 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 4.64 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.63 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 8.17 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.95 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.26 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 15.10 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.10 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 35.96 |
| FRaME | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.15 |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 5.88 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 7.22 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 11.68 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 13.64 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.46 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 21.76 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 36.10 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 4.25 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 5.64 |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 5.68 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.60 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 10.75 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 12.76 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 18.78 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 36.49 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.23 |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 5.65 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 6.66 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 11.53 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 13.12 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 13.64 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 21.01 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 38.77 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.45 |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 6.10 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 7.01 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 12.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 13.70 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.54 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.13 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 41.51 |
| *Rate of Spread* | | | | | |
| FFDM | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.05 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.05 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.21 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 17.89 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 22.95 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.03 |
| Vesta Mk 2 | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.18 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 9.82 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.76 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 15.18 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.35 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 23.67 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 39.25 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.18 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 9.82 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.75 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 15.17 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.34 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 23.67 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 39.23 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.18 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 9.82 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.75 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 15.17 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.34 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 23.67 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 39.23 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.98 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.18 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 9.82 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.75 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 15.17 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.34 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 23.67 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 39.23 |
| FRaME | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 5.46 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.01 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 11.64 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 12.12 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 18.50 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 19.07 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 26.82 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 41.74 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 5.33 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.47 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 12.47 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 12.95 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 19.71 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 20.86 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 28.53 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 48.83 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 6.10 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.49 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 7.91 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 13.25 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 15.45 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 15.83 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 24.28 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 45.06 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 3.20 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.66 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 9.47 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 12.28 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 16.83 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 19.36 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 24.76 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.14 |
| *Fireline Intensity* | | | | | |
| FFDM | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 4.73 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.46 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.76 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 11.85 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 16.83 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.66 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 25.63 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 46.00 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | ***10*** | ***0.00*** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | *12* | 4.73 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | *12* | 6.46 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | *14* | 10.76 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | *14* | 11.85 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | *16* | 16.83 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | *16* | 18.66 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | *18* | 25.63 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | *22* | 46.00 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 4.73 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.46 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.76 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 11.85 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 16.83 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.66 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 25.63 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 46.00 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 4.73 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.46 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.76 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 11.85 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 16.83 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.66 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 25.63 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 46.00 |
| Vesta Mk 2 | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 3.87 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.25 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.77 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 12.38 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 17.62 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 20.07 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 26.21 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.11 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 3.04 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.41 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.12 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 10.19 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 14.44 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.03 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 23.18 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 42.23 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 3.87 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.25 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.77 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 12.38 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 17.62 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 20.07 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 26.21 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 44.11 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 3.87 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.25 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 10.77 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 12.38 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 17.62 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 20.07 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 26.21 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 44.11 |
| FRaME | **WF03** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 5.72 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.24 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 11.16 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 12.62 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 18.28 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.82 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 26.84 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 44.59 |
|  | **WF07** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 6.23 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.44 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 12.16 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 13.34 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 19.83 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 20.04 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 28.61 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 48.44 |
|  | **WF17** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 5.81 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 6.46 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 8.28 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 12.93 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 15.53 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 16.17 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 24.32 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 44.85 |
|  | **SuAv** | **1** | ***Herbivory+Fire+TSF*** | **10** | **0.00** |
|  |  | 2 | *Herbivory+Fire+TSF + Herbivory:Fire* | 12 | 2.64 |
|  |  | 3 | *Herbivory+Fire+TSF + Fire:TSF* | 12 | 5.86 |
|  |  | 5 | *Herbivory+Fire+TSF + Herbivory:Fire+ Fire:TSF* | 14 | 9.12 |
|  |  | 4 | *Herbivory+Fire+TSF + Herbivory:TSF* | 14 | 11.23 |
|  |  | 6 | *Herbivory+Fire+TSF + Herbivory:Fire + Herbivory:TSF* | 16 | 15.13 |
|  |  | 7 | *Herbivory+Fire+TSF + Fire:TSF + Herbivory:TSF* | 16 | 18.50 |
|  |  | 8 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF* | 18 | 23.25 |
|  |  | 9 | *Herbivory+Fire+TSF + Herbivory:Fire+ Herbivory:TSF + Fire:TSF + Herbivory:Fire:TSF* | 22 | 40.82 |

Table S : Model selection and descriptions of the nine generalized linear mixed models (GLMM) analysed for projected fire behaviour outputs of flame height, rate of spread and fireline intensity in large (4 ha) plots produced from three fire prediction models and four weather scenarios. Fire prediction models include the Forest Fire Danger Meter (FFDM), Vesta Mk 2 and the Fire Research and Modelling Environment (FRaME). Weather scenarios are described in Table 3 of the manuscript. Models in bold indicate the most parsimonious model selected by the least degrees of freedom and delta AICc < 2. Model descriptions relate to the fencing treatment (Herbivory – open or closed) and time since fire (TSF – 1, 2 or 3 years).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fire Model | Weather Scenario | Model No. | Model Description | DF | ΔAICc |
| Flame Height | | | | | |
| FFDM | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
| Vesta Mk 2 | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 7.05 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 7.39 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 7.05 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 7.05 |
| FRaME | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.40 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 5.85 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.88 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 11.33 |
| Rate of Spread | | | | | |
| FFDM | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.62 |
| Vesta Mk 2 | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 6.79 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 6.80 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 6.81 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 6.81 |
| FRaME | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.42 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 11.20 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 4.12 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.54 |
| Fireline Intensity | | | | | |
| FFDM | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.78 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.78 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.78 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.78 |
| Vesta Mk 2 | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.19 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.66 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.20 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.20 |
| FRaME | **WF03** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.27 |
|  | **WF07** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 10.85 |
|  | **WF17** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 6.92 |
|  | **SuAv** | **1** | ***Herbivory+TSF*** | **9** | **0.00** |
|  |  | 2 | *Herbivory+TSF + Herbivory:TSF* | 11 | 12.81 |