

Fire and Fire Surrogates Study: First Network Results

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Three Treatments + Control



Burn



Mechanical



Mech / Burn

Fire and ***Fire*** ***Surrogate*** ***Study***



Not all network data yet available

For vegetation results: 6 – 8 sites

For fuels results: 3 – 5 sites

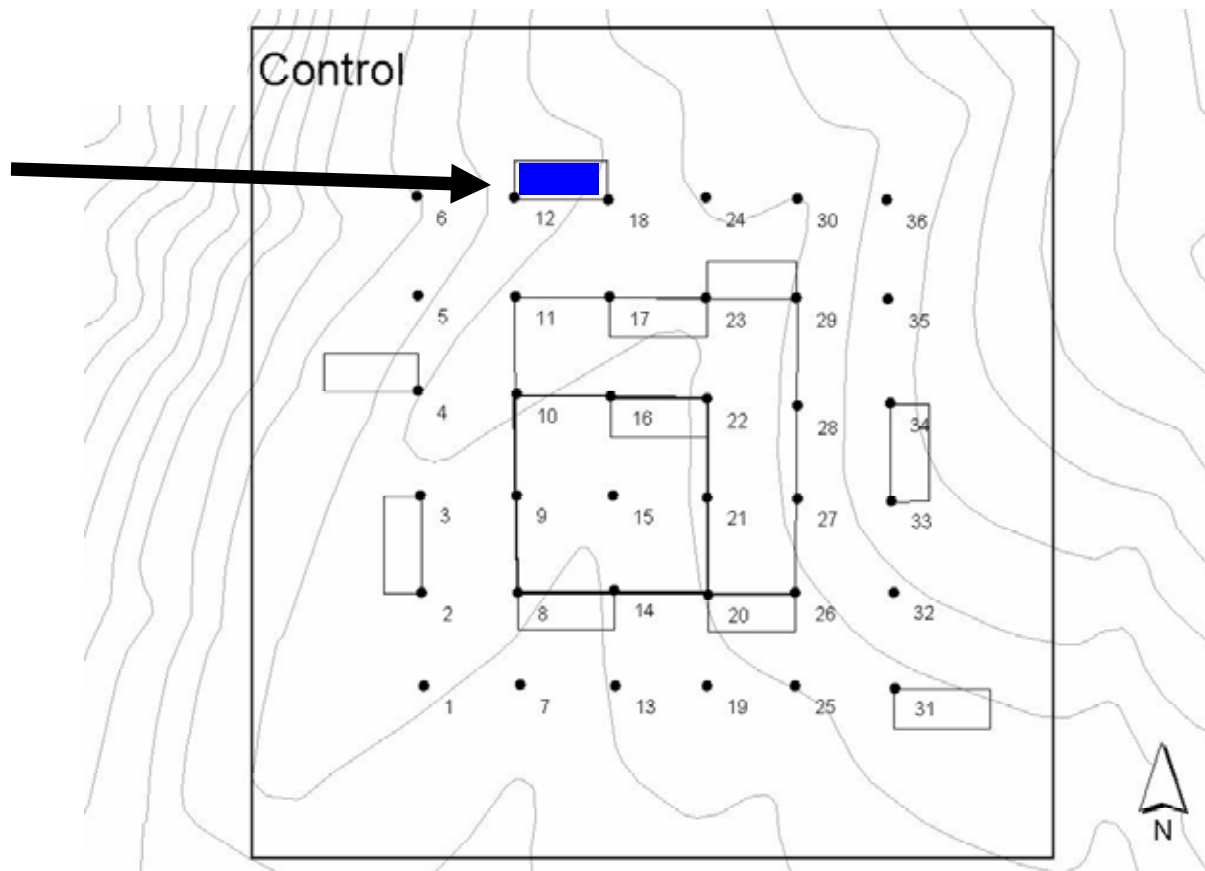
Mix of western and eastern sites

Analyses

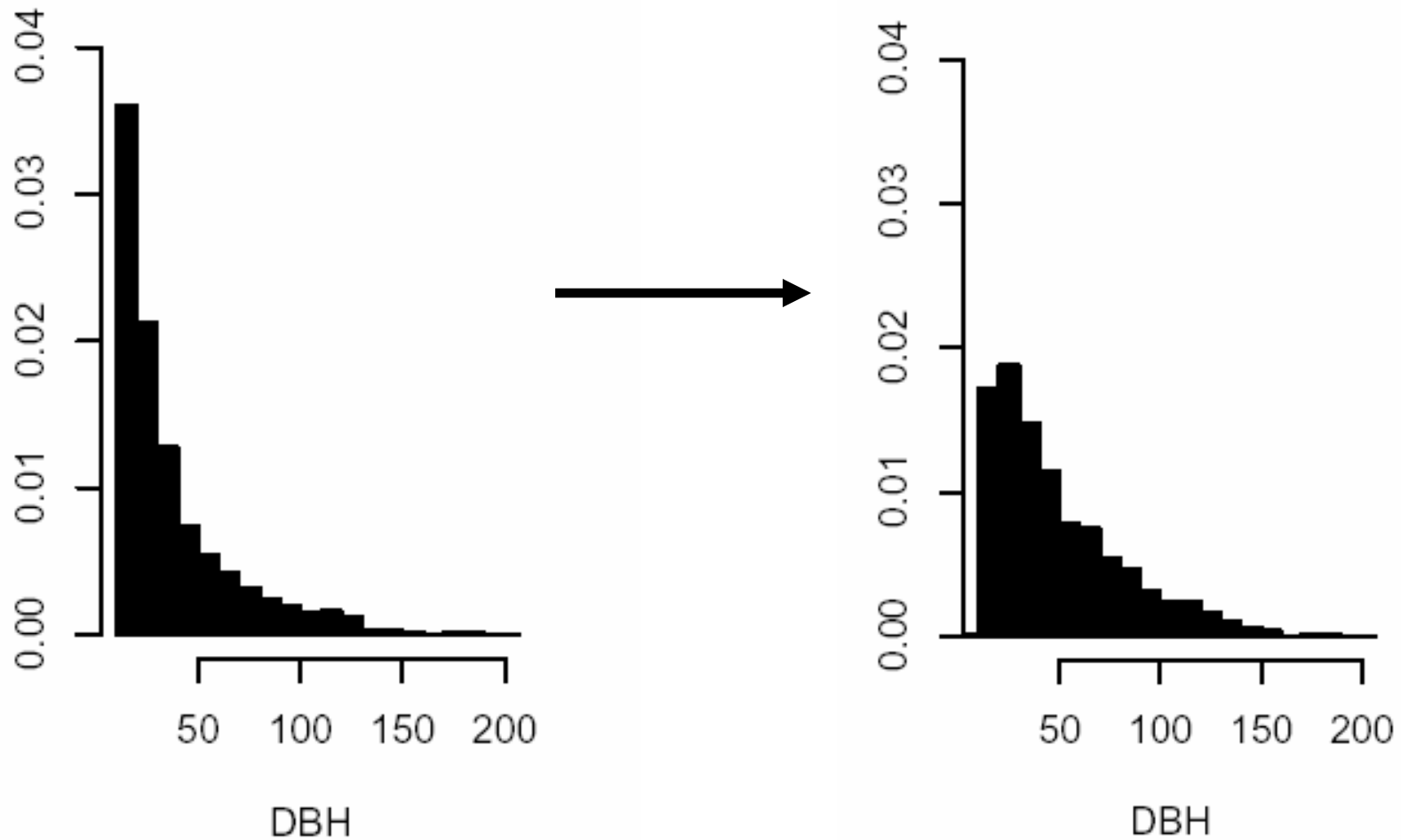
- Treatment effects on tree size distributions and density
- Treatment effects on understory cover
- Treatment effects on plant diversity.

All results presented are based on pre treatment vs. post treatment differences at the plot scale.

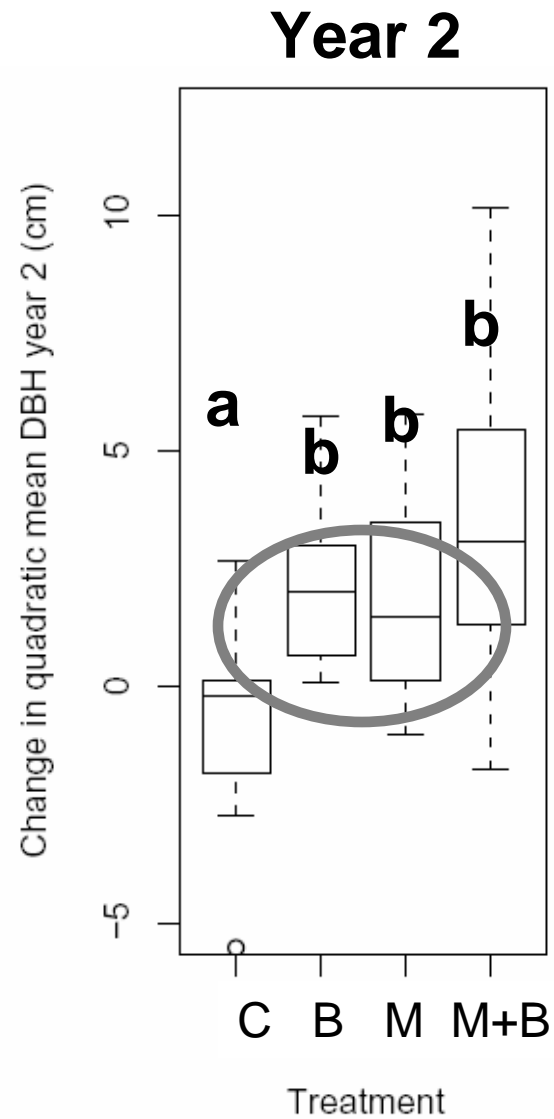
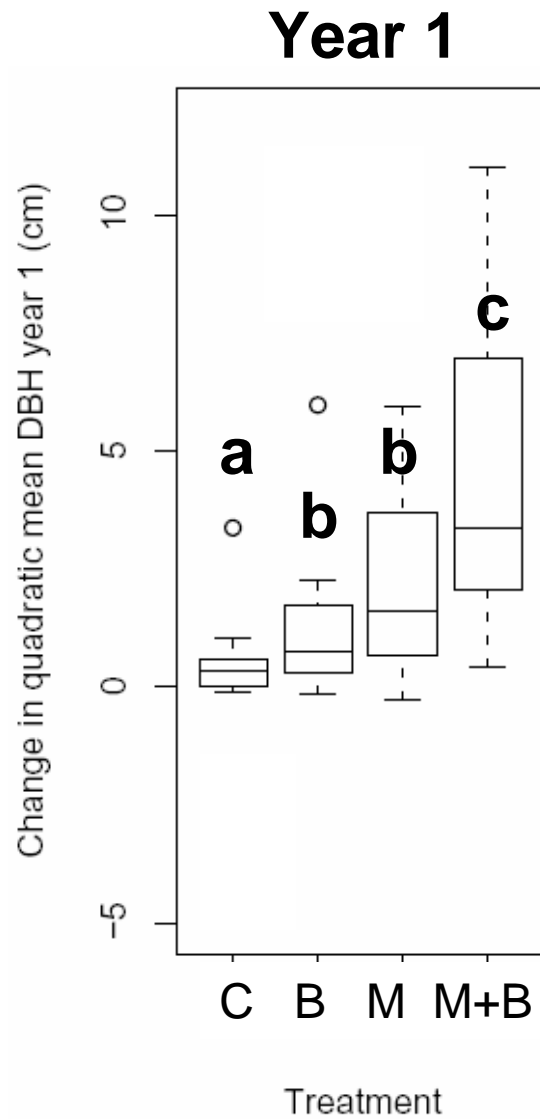
Vegetation Plots within Experimental Units



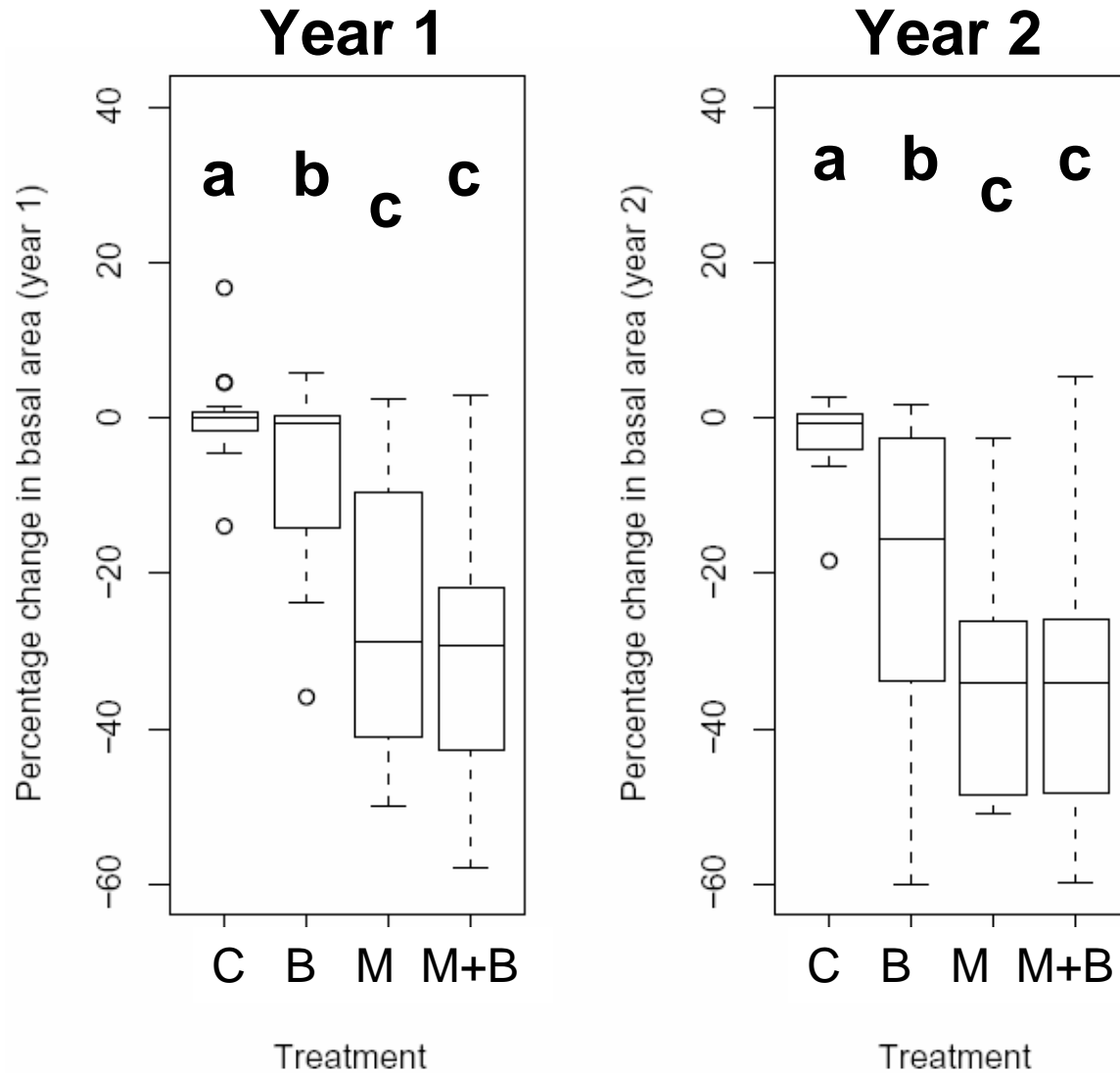
Changes in Tree Density and Size Distributions



Changes in Mean Diameter

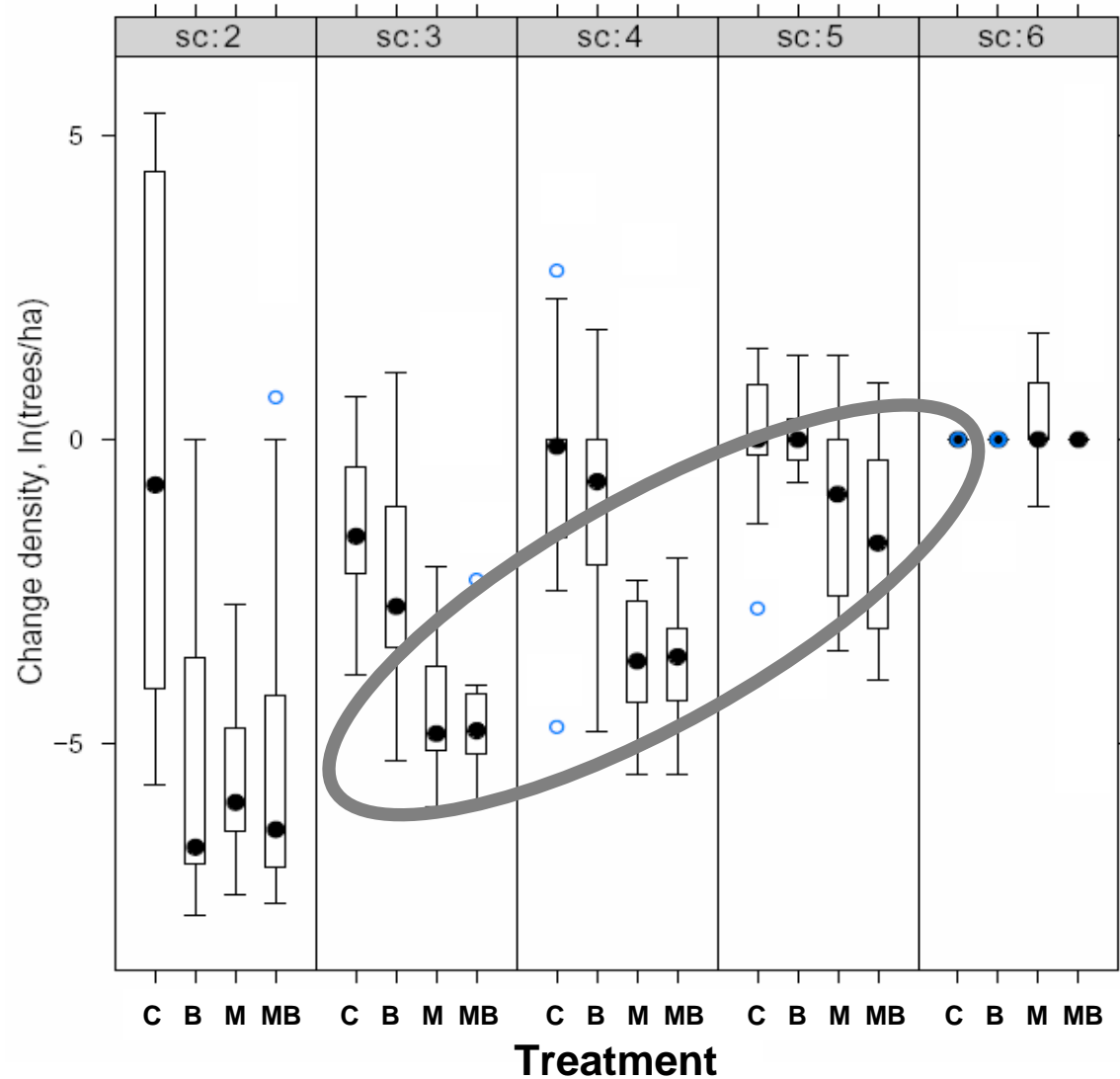


Changes in Basal Area



Tree Density Change by Relative Size Class

Year 1



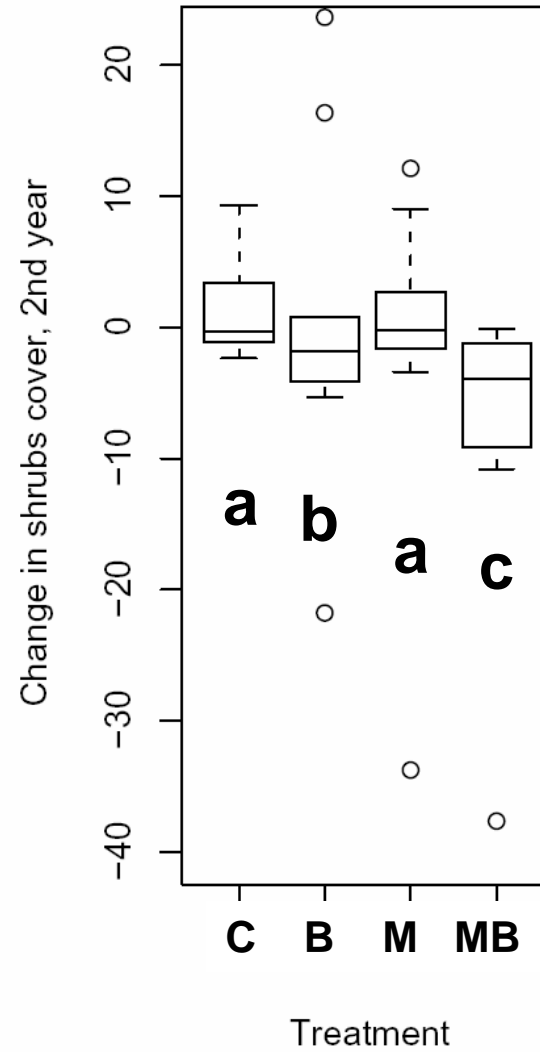
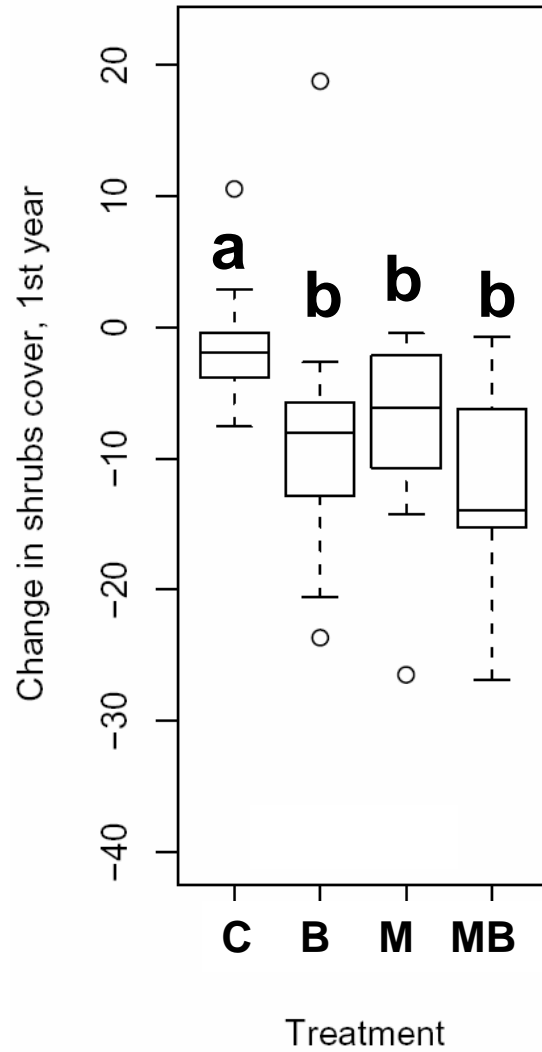
Treatment Effects on Tree Size Distribution

- Burning alone results in less change to size distribution than do other fuel treatments.
- There is a suggestion that this difference is lessened by the second year as fire-wounded trees die.

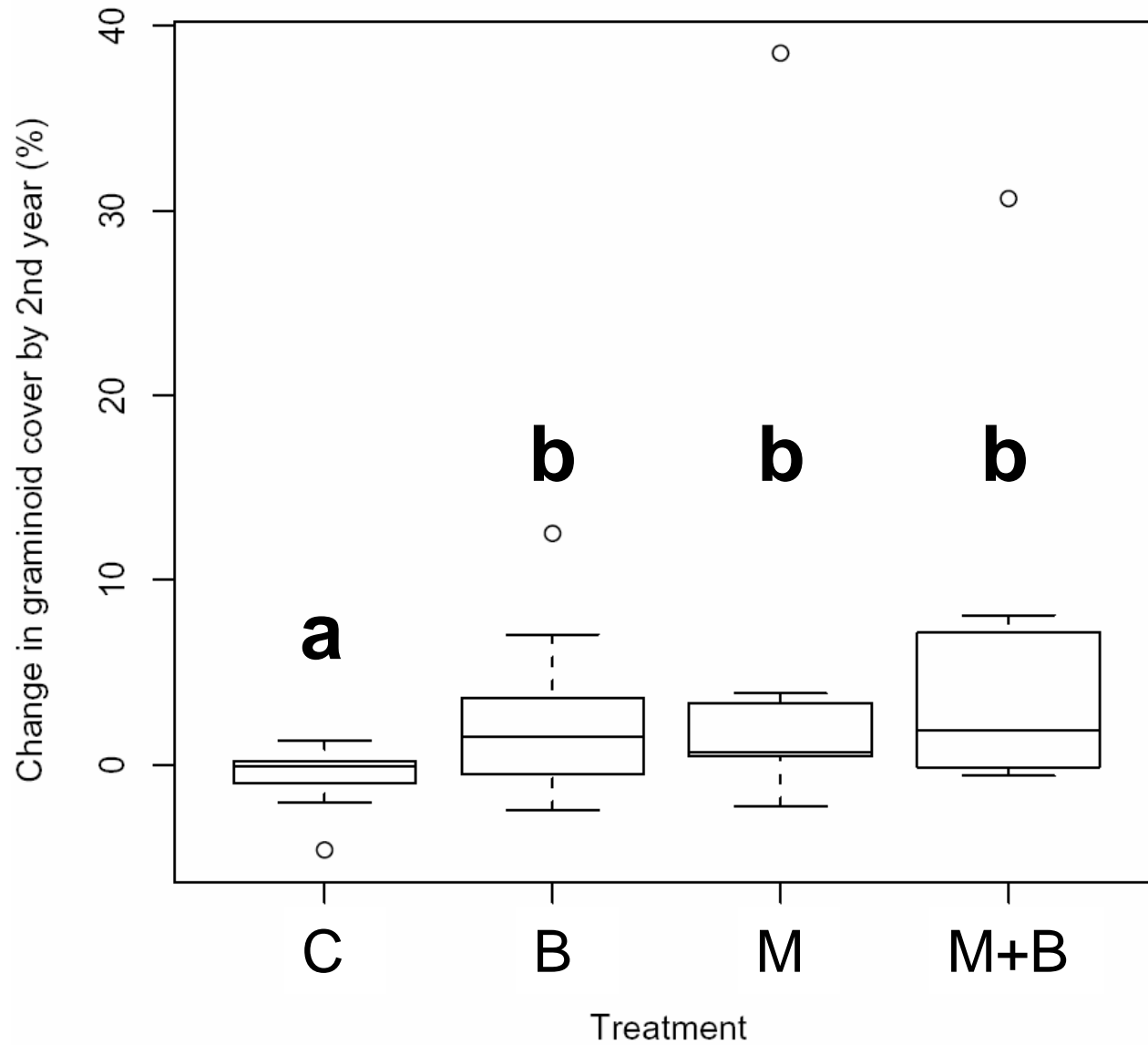
Changes in Understory Vegetation

- Shrub cover
- Graminoid cover
- Diversity

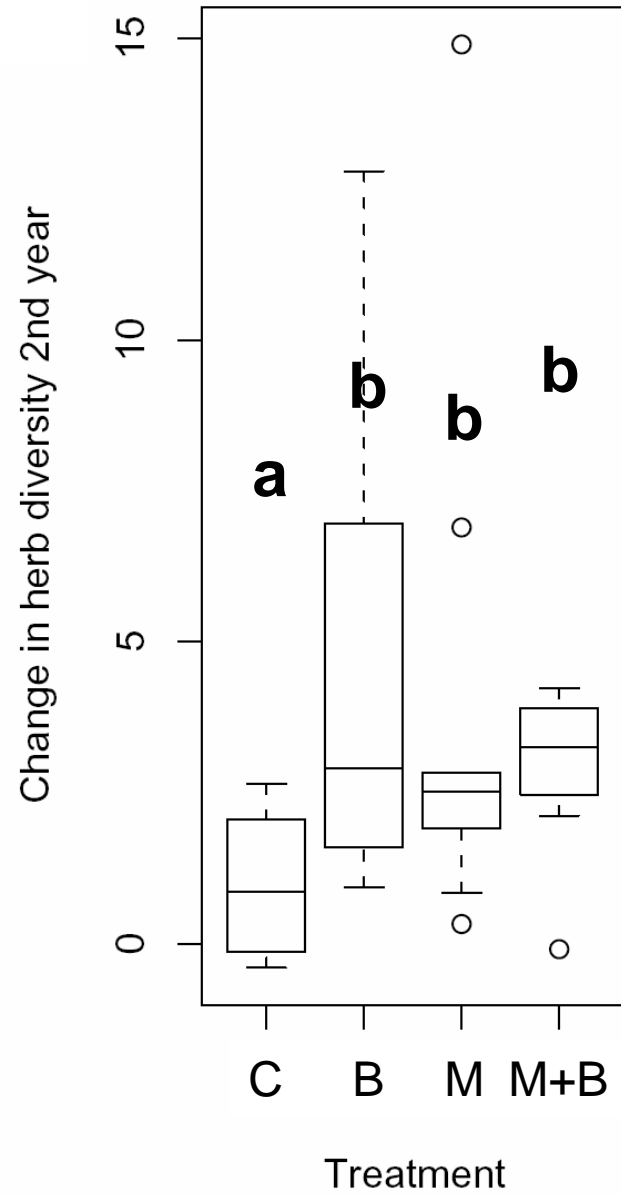
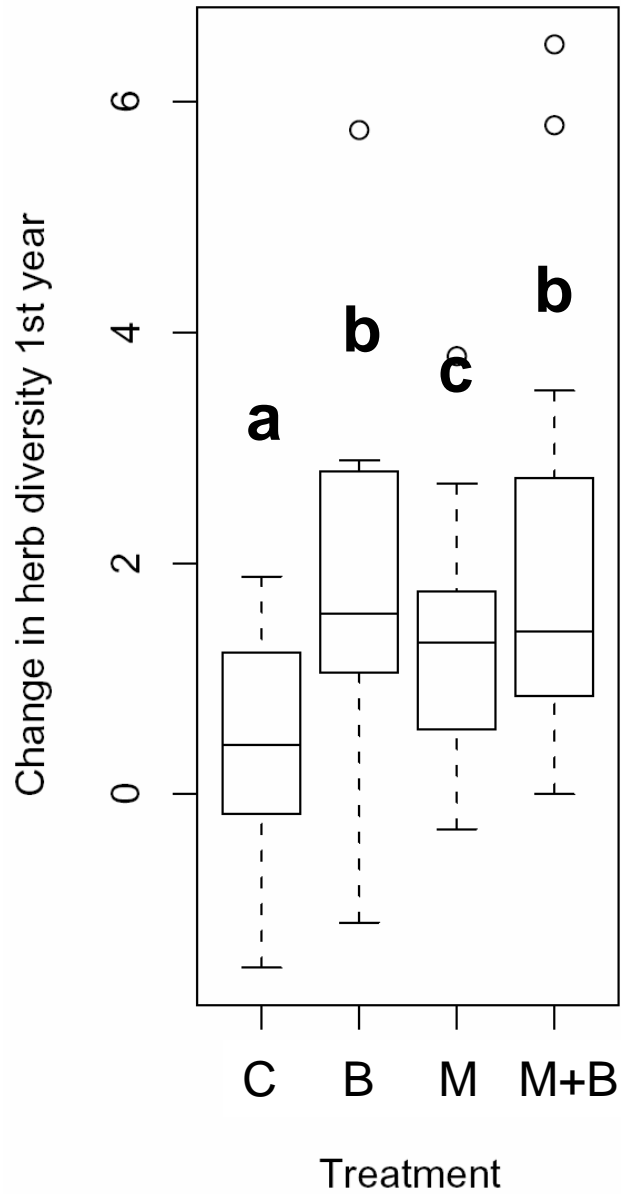
Changes in Shrub Cover



Changes in Graminoid Cover



Changes in Herb Diversity 1 m²



Conclusions: Diversity and Cover

- In the short term, all fuel treatments reduced shrub cover, with the strongest reduction in B and M+B.
- Graminoid cover increased equally in all treatments.
- Herbaceous species diversity increased in all treatments and was highest in B and M+B.

