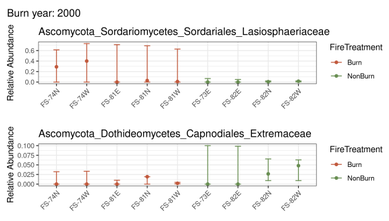
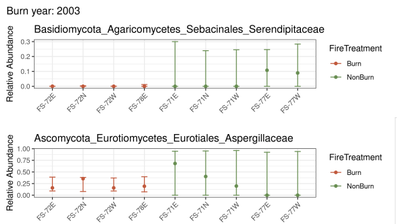
Supplemental Info

Differential abundance plots, split by burn year

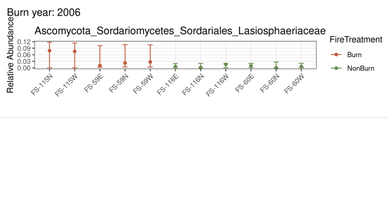
Burn year: 2000



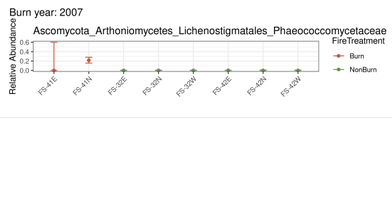
Burn year: 2003



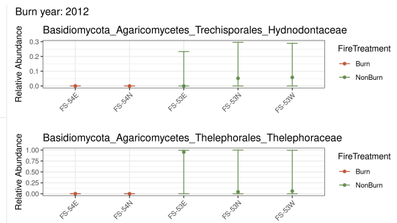
Burn year: 2006



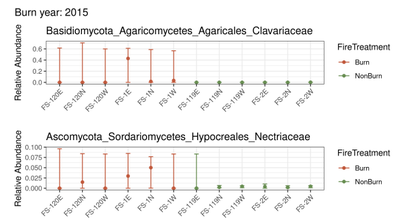
Burn year: 2007



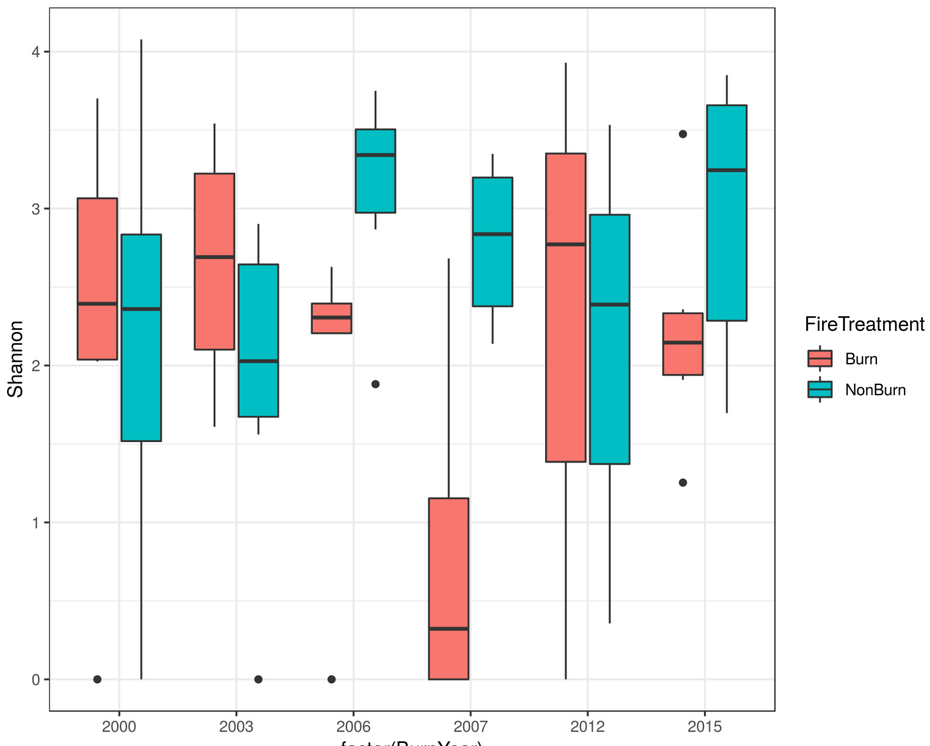
Burn year: 2012



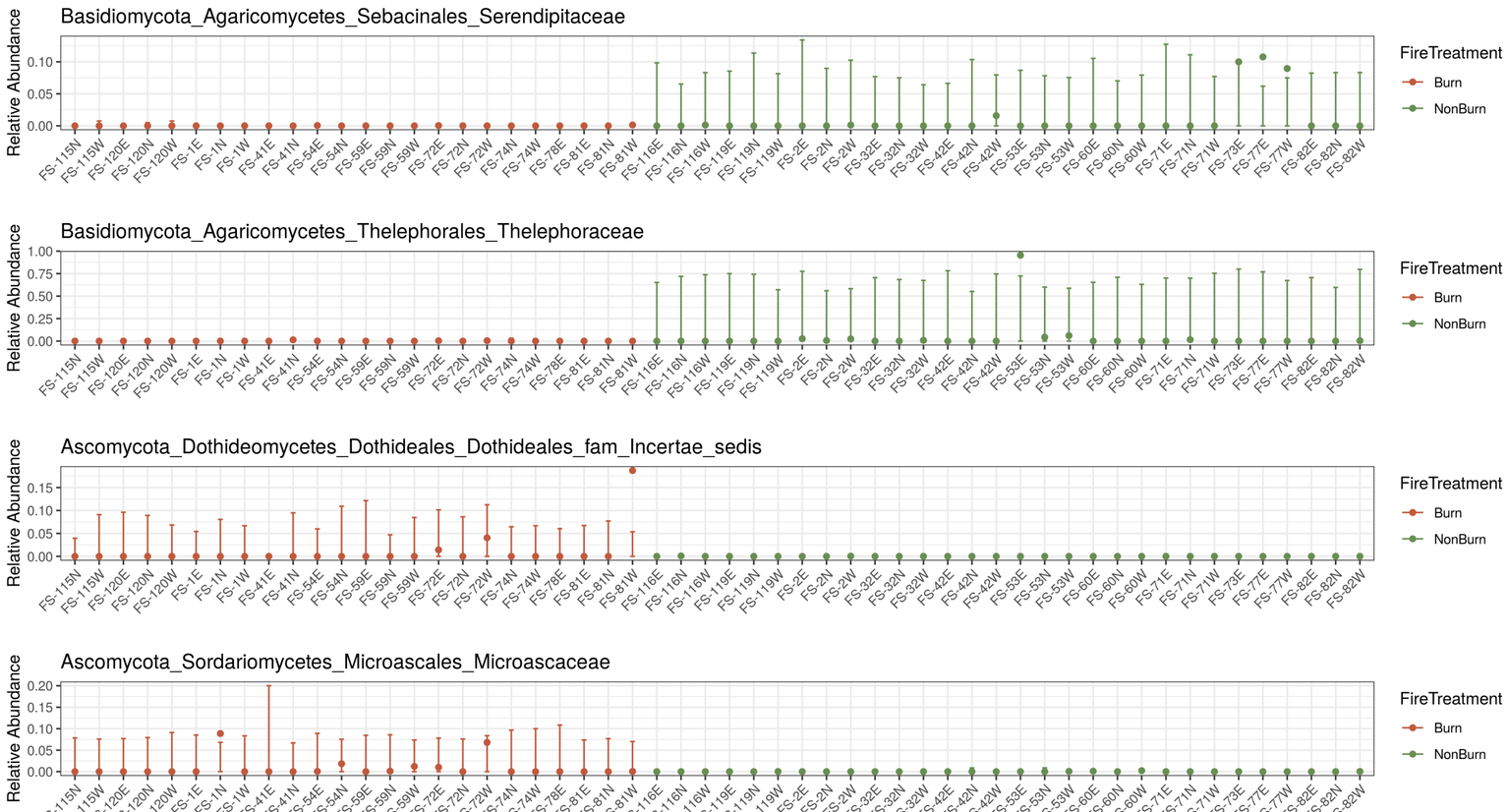
Burn year: 2015



Shannon diversity over time



Differential abundance plot of fungal families based on fire treatment – All burn years included



BBDML Model Summaries for previous plot:

```
$Basidiomycota_Agaricomycetes_Sebacinales_Serendipitaceae

Call:
bbdml(formula = forms[[i]], phi.formula = phi.form, data = ps_object)



Coefficients associated with abundance:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)          -8.5052     0.6826 -12.460  < 2e-16 ***
FireTreatmentNonBurn   3.8291     1.1045   3.467  0.00109 **
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Coefficients associated with dispersion:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)          -6.8706     0.9983  -6.882 9.17e-09 ***
FireTreatmentNonBurn   5.4626     1.3846   3.945 0.000249 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Log-likelihood: -51.102

$Basidiomycota_Agaricomycetes_Thelephorales_Thelephoraceae

Call:
bbdml(formula = forms[[i]], phi.formula = phi.form, data = ps_object)



Coefficients associated with abundance:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)          -6.7827     0.7614  -8.908 6.78e-12 ***
FireTreatmentNonBurn   3.9770     0.9300   4.276 8.55e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Coefficients associated with dispersion:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)          -4.4202     0.9613  -4.598 2.93e-05 ***
FireTreatmentNonBurn   4.6388     1.1044   4.200  0.00011 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Log-likelihood: -97.859

$Ascomycota_Dothideomycetes_Dothideales_Dothideales_fam_Incertae_sedis

Call:
bbdml(formula = forms[[i]], phi.formula = phi.form, data = ps_object)



Coefficients associated with abundance:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)           -4.656      1.055  -4.414 5.42e-05 ***
FireTreatmentNonBurn   -4.914      1.391  -3.532 0.000896 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Coefficients associated with dispersion:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)            -1.069      1.171  -0.913  0.36558
FireTreatmentNonBurn   -5.768      1.688  -3.417  0.00127 **
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Log-likelihood: -43.842

$Ascomycota_Sordariomycetes_Microascales_Microascaceae

Call:
bbdml(formula = forms[[i]], phi.formula = phi.form, data = ps_object)



Coefficients associated with abundance:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)          -4.6707     0.5391  -8.664 1.59e-11 ***
FireTreatmentNonBurn  -3.7176     0.7884  -4.716 1.97e-05 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1



Coefficients associated with dispersion:
                    Estimate Std. Error t value Pr(>|t|)
(Intercept)          -2.7315     0.6586  -4.147 0.000130 ***
FireTreatmentNonBurn  -3.7894     1.0248  -3.698 0.000541 ***
```