Disturbance Stem Maps

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Disturbance Stem Maps

The following document produces stem maps that assign mortality and treatments for the FoRTE project.

A01

```
## A01E, 85%, Bottom-Up
##
## kill live
##
     78
                                                                                            10
            A01E - 85% - Bottom-Up
                                                                                            20
    45.5638
                                      0
                                                                                            30
                                                           0
                                                                                            40
                                                                                            50
                                                                                       genus
    45.5637
                                                                                            Acer
              0
                                                                                            Betula
                                                                               0
                                                                                            Fagus
                                                                                            Other
                                                             0
                                                                                            Pinus
    45.5636
                                                                                            Populus
                                                                                            Quercus
                                                                            0
                                                                                            Tsuga
                                                                                       fate
                                                   -84.7283
                       -84.<del>7</del>285
                                     -84.<del>7</del>284
                                                                 -84.7282
         -84.7286
                                                                               -84.728
                                                                                            kill
                                          Longitude
                                                                                            liv.
## Plot LAI
## [1] 8.958299
## LAI of all trees to Kill
## [1] 7.444159
## Ratio of Kill to Live LAI - Targetting 85% Disturbance threshold
```

```
## [1] 0.8309792
## A01W, 85%, Top-Down
##
## kill live
     55
##
                                                                                   (leaf.area/10)
            A01W - 85% - Top-Down
    45.5638
                                                                                        10
                                                                                        20
                                                                                        30
                                                                                   genus
    45.5637
                                                                                        Acer
                                                                                        Betula
                                                                                        Fagus
                                                                                        Other
    45.5636
                                                                                        Pinus
                                                                                        Populus
                                                                                        Quercus
                                                                                        Tsuga
    45.5635
                                                                                   fate
                                                                                        kill
             -84.<del>7</del>291
                            -84.7290
                                            -84.7289
                                                           -84.7288
                                                                           -84.728°
                                                                                        live
                                         Longitude
## Plot LAI A01W
## [1] 9.191563
## LAI of all trees to Kill
## [1] 7.766356
\mbox{\tt \#\#} Ratio of Kill to Live LAI - Targeting 85\% Disturbance threshold
## [1] 0.844944
A02
## A02E, 45%, top-down
```

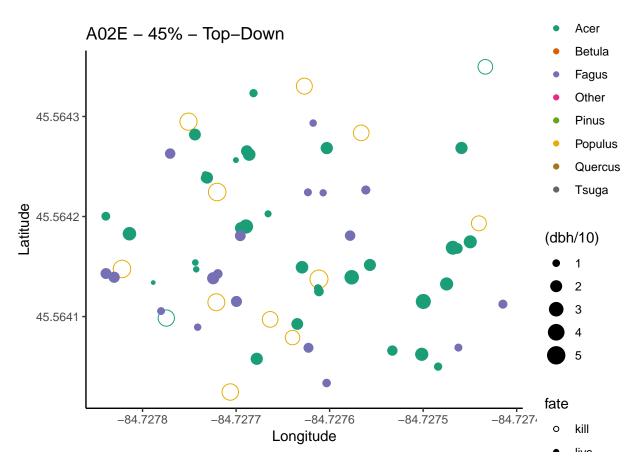
##

##

kill live

13

51



```
## Plot LAI A02E
```

[1] 7.417774

LAI of all trees to Kill

[1] 3.204551

 $\mbox{\tt \#\#}$ Ratio of Kill to Live LAI - Targeting 45% Disturbance threshold

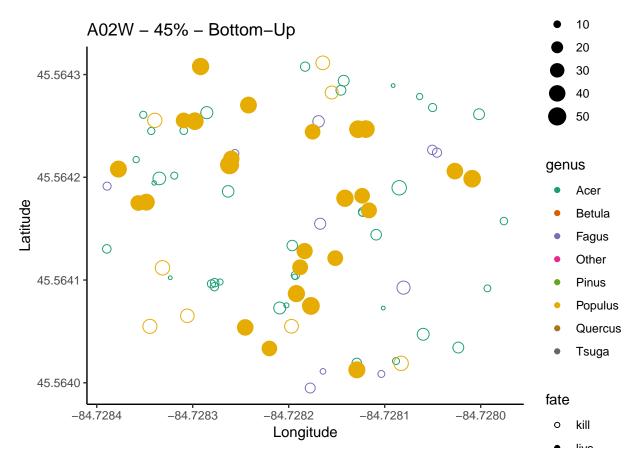
[1] 0.4320098

A02W, 45%, Bottom-Down

##

kill live

57 25



```
## Plot LAI A02W
```

[1] 9.629799

LAI of all trees to Kill

[1] 4.324904

Ratio of Kill to Live LAI - Targeting 45% Disturbance threshold

[1] 0.4491167

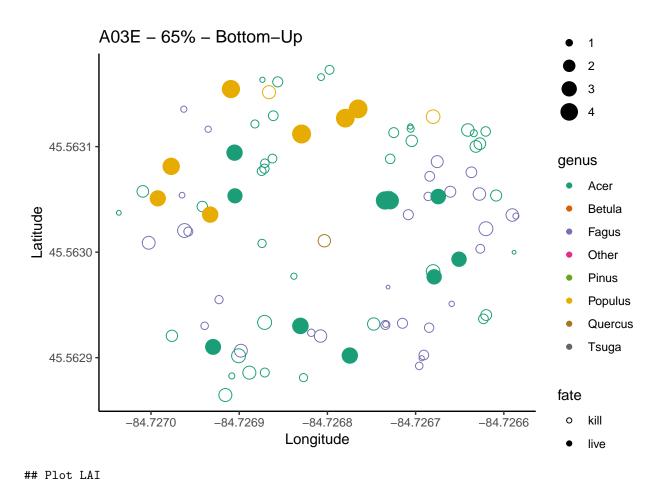
A03

A03E, 65%, Bottom-Down

##

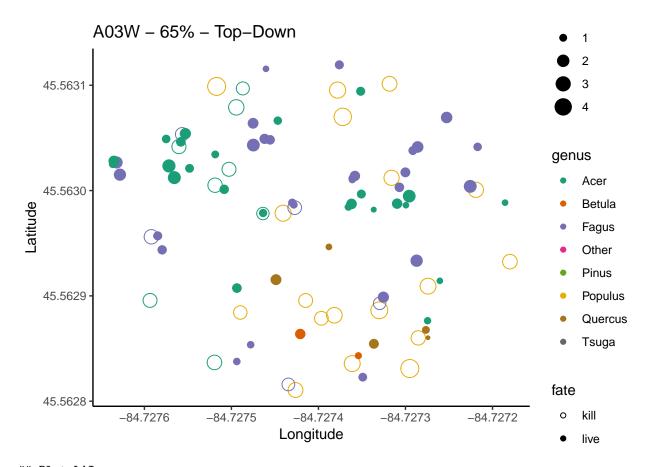
kill live

74 17



```
## [1] 8.900299
## LAI of all trees to Kill
## [1] 5.597937
## Ratio of Kill to Live LAI - Targetting 65% Disturbance threshold
## [1] 0.6289605
## A03W, 65%, top-down
```

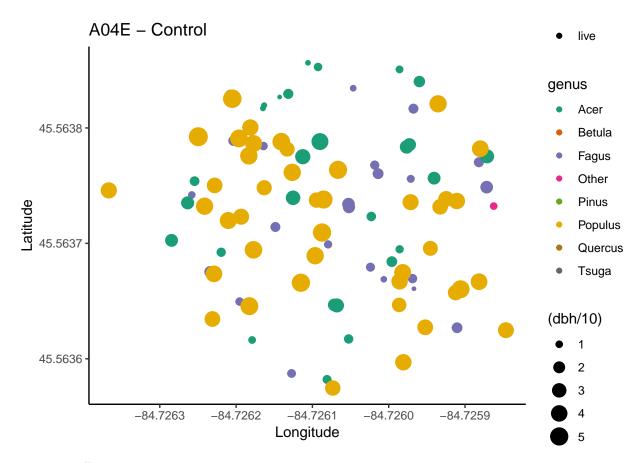
kill live ## 31 59



```
## Plot LAI
## [1] 8.356384
## LAI of all trees to Kill
## [1] 5.309249
## Ratio of Kill to Live LAI - Targetting 65% Disturbance threshold
## [1] 0.6353525
```

A04

A04E, 0%, Control
##
live
95

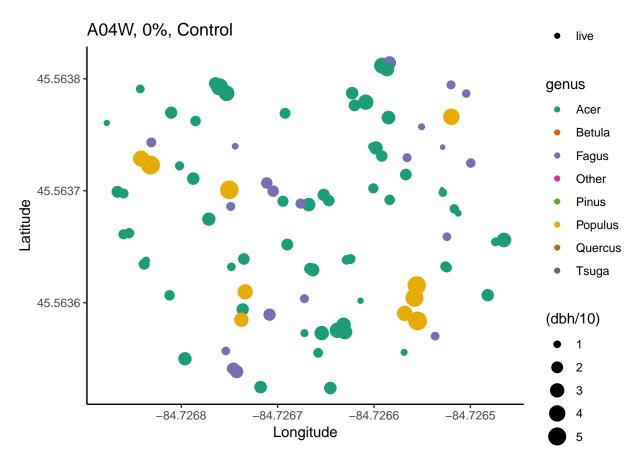


A04W, 0%, Control

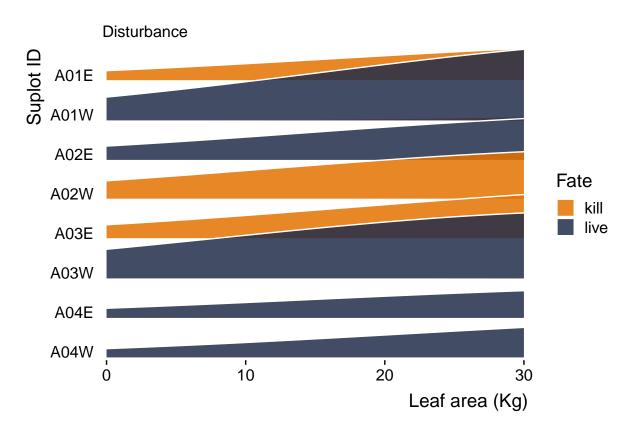
##

live

94



Picking joint bandwidth of 24.5



```
## Total mortality count
```

##

kill live

308 377

 $\mbox{\tt \#\#}$ Estimated total number of trees killed for all 0.5 ha plots combined in Group A

[1] 770

