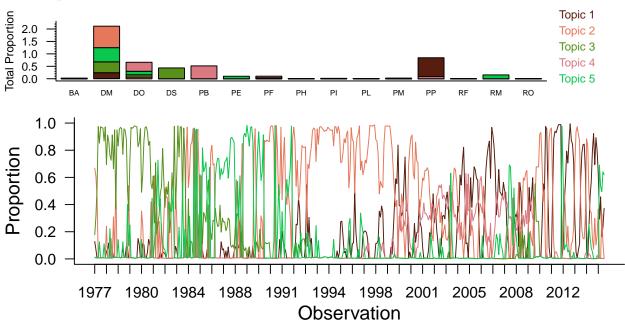
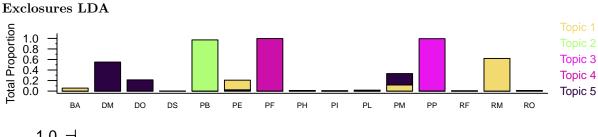
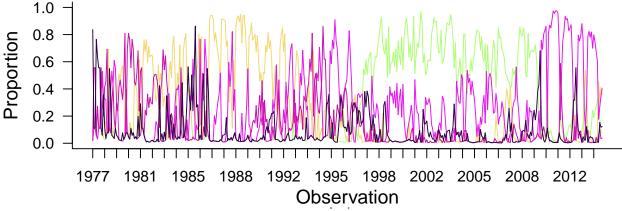
With weights all equal

LDA models

Control plots LDA







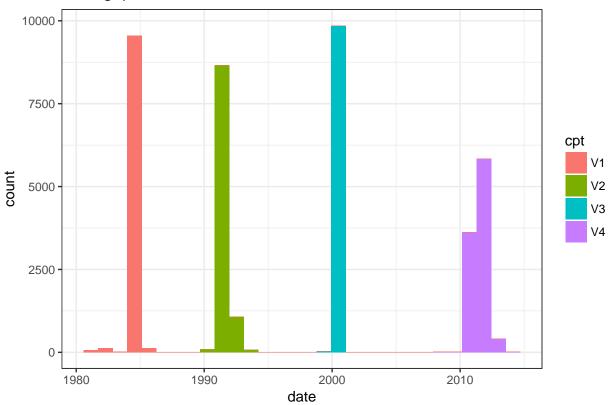
Changepoint models

Selected changepoint model for control plots

```
## Mean_date Median_date Lower_date Upper_date SD MCMCerr AC10
## 1 1984-04-29 1984-04-29 1983-11-12 1985-02-16 5.45 0.0548 0.5925
## 2 1990-07-21 1990-04-24 1990-01-06 1992-05-02 8.24 0.0828 0.6924
## 3 1999-07-02 1999-07-02 1999-01-16 1999-11-06 3.00 0.0302 0.4084
## 4 2010-01-16 2009-12-12 2009-05-23 2010-11-06 4.81 0.0483 0.4022
## ESS
## 1 206.8850
## 2 148.7599
## 3 388.6958
## 4 397.8093
```

`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.

Changepoint estimates – control



Deviances for different numbers of changepoints - control

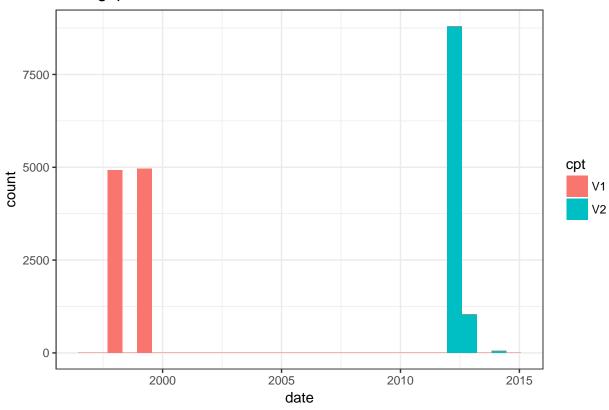
```
## $`2`
## [1] 1002.764
## 
## $`3`
## [1] 977.7195
## 
## $`4`
## [1] 969.1159
## 
## $`5`
## [1] 985.0726
```

```
## $`6`
## [1] 1001.046
```

Selected changepoint model for exclosure plots

```
## Mean_date Median_date Lower_date Upper_date SD MCMCerr AC10
## 1 1997-06-09 1997-06-09 1996-12-18 1997-09-27 2.57 0.0258 0.1086
## 2 2010-02-13 2010-01-16 2009-08-22 2010-07-30 3.27 0.0329 0.1204
## ESS
## 1 1408.850
## 2 1350.911
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

Changepoint estimates - exclosure



Deviances for different numbers of changepoints - exclosure

```
## $`2`

## [1] 1085.76

##

## $`3`

## [1] 1092.389

##

## $`4`

## [1] 1093.9

##

## $`5`

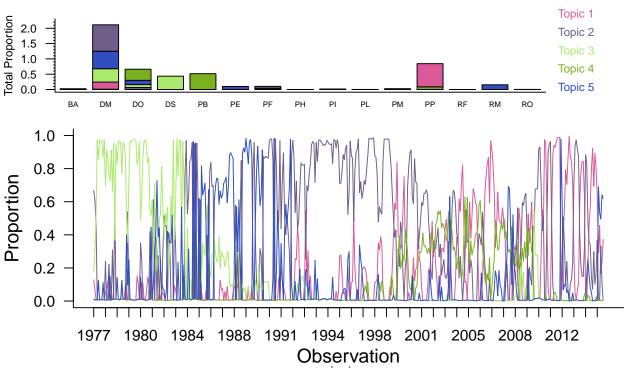
## [1] 1109.777
```

```
##
## $`6`
## [1] 1129.324
```

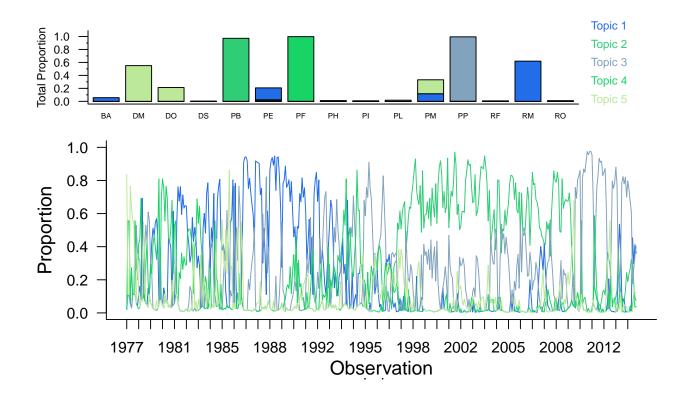
With weights proportional to rodents captured

LDA models

Control plots LDA



Exclosures LDA

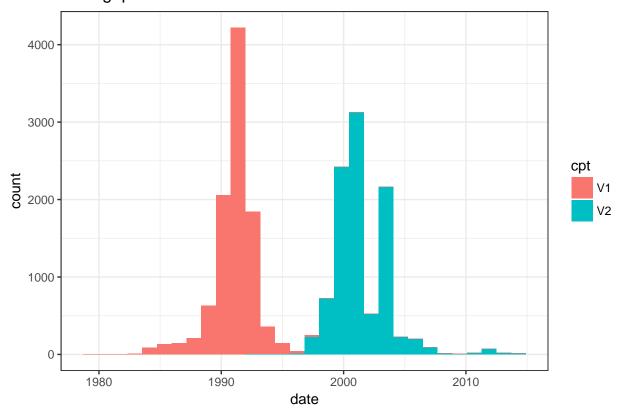


Changepoint models

Selected changepoint model for control plots

```
## Mean_date Median_date Lower_date Upper_date SD MCMCerr AC10
## 1 1990-03-29 1990-03-29 1986-11-15 1994-04-10 21.50 0.2161 0.1464
## 2 2000-06-03 1999-10-09 1997-06-09 2004-10-16 26.01 0.2614 0.2014
## ESS
## 1 1064.1087
## 2 815.0804
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
## Warning: Removed 2 rows containing non-finite values (stat_bin).
```

Changepoint estimates - control



Deviances for different numbers of changepoints - control

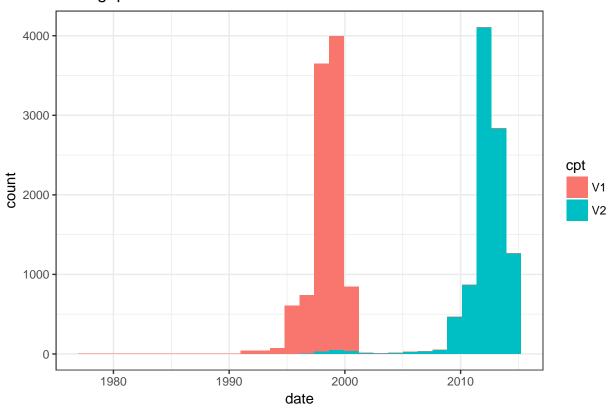
```
## $`2`
## [1] 326.1653
##
## $`3`
## [1] 341.7651
##
## $`4`
## [1] 359.7364
##
## $`5`
## [1] 381.935
##
## $`6`
## [1] 405.5465
```

Selected changepoint model for exclosure plots

```
## Mean_date Median_date Lower_date Upper_date SD MCMCerr AC10
## 1 1997-02-08 1997-05-10 1994-08-17 1998-11-21 15.98 0.1606 0.1261
## 2 2010-01-16 2010-03-13 2007-09-08 2012-02-19 22.45 0.2256 0.1314
## ESS
## 1 1330.156
## 2 1255.430
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

Warning: Removed 85 rows containing non-finite values (stat_bin).

Changepoint estimates - exclosure



Deviances for different numbers of change points - exclosure $\,$

```
## $`2`

## [1] 251.9173

##

## $`3`

## [1] 274.9446

##

## $`4`

## [1] 298.9691

##

## $`5`

## [1] 322.861

##

## $`6`

## [1] 347.9441
```