## Results

# Renata Diaz 5/30/2018

## Exclosure plots

Granivores only, fewer plots (4), full time series.

load('models/excl\_time\_gran.Rdata')

#### LDA model: Topic 1 Total Proportion 1.0 0.8 0.6 Topic 3 0.4 Topic 4 0.2 Topic 5 0.0 ВА DM DO DS РΒ PΕ PF RF RMRO 1.0 8.0 **Proportion** 0.6 0.4 0.2 0.0 200 300 0 100 400 Observation

## Changepoint model:

```
## Mean Median Lower Upper SD MCMCerr AC10 ESS
## Changepoint_1 219.24 224 185 242 18.6 0.1869 0.2304 595.5178
## Changepoint_2 368.31 375 326 400 28.9 0.2905 0.3492 316.6409
```

Here are some more diagnostics:

```
## $acceptance_rates
## [1] 0.5480808 0.8333333 0.9108081 0.9355556 0.9440404 0.9434343
##
## $swapping_rates
## [1] 0.1996970 0.5481818 0.8009091 0.9240404 0.9578788
##
```

## \$trip\_counts

```
## [1] 96 105 105 93 97 87
```

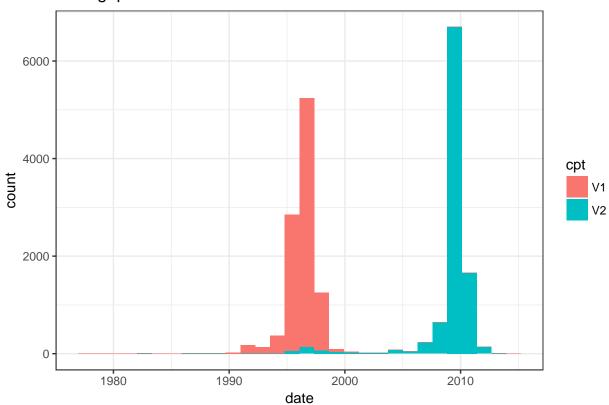
##

## \$trip\_rates

**##** [1] 0.009696970 0.010606061 0.010606061 0.009393939 0.009797980 0.008787879

## `stat\_bin()` using `bins = 30`. Pick better value with `binwidth`.

# Changepoint estimates - exclosures

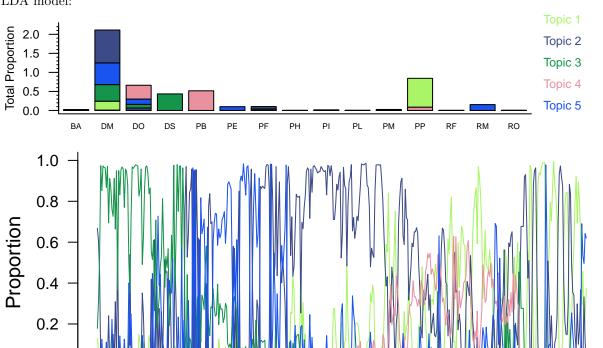


## Control plots

Granivores only, fewer plots (4), full time series.

```
load('models/ctrl_time_gran.Rdata')
```

#### LDA model:



200

Observation

300

400

### Changepoint model:

0.0

```
## Changepoint_1 146.59 145 108 193 20.67 0.2077 0.1130 1173.4583 ## Changepoint_2 266.10 259 233 313 23.59 0.2371 0.1794 716.1593
```

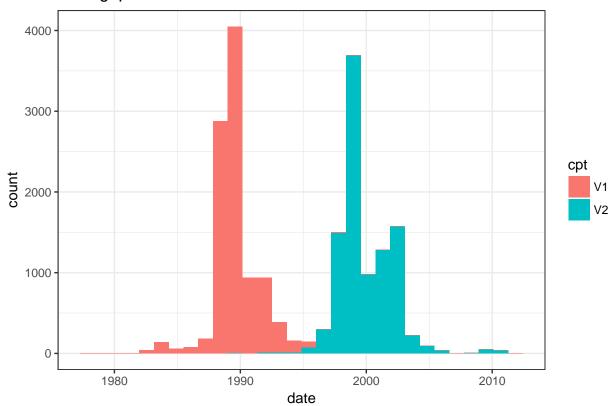
100

Here are some more diagnostics:

0

```
## $acceptance_rates
## [1] 0.6030303 0.8361616 0.9162626 0.9341414 0.9427273 0.9430303
##
## $swapping_rates
## [1] 0.3097980 0.5561616 0.7623232 0.8917172 0.9348485
##
## $trip_counts
## [1] 133 122 155 151 139 143
##
## $trip_rates
## [1] 0.01343434 0.01232323 0.01565657 0.01525253 0.01404040 0.01444444
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

# Changepoint estimates – controls



# Changepoint estimates

