Northland Data

Simon Woodward, DairyNZ 2018

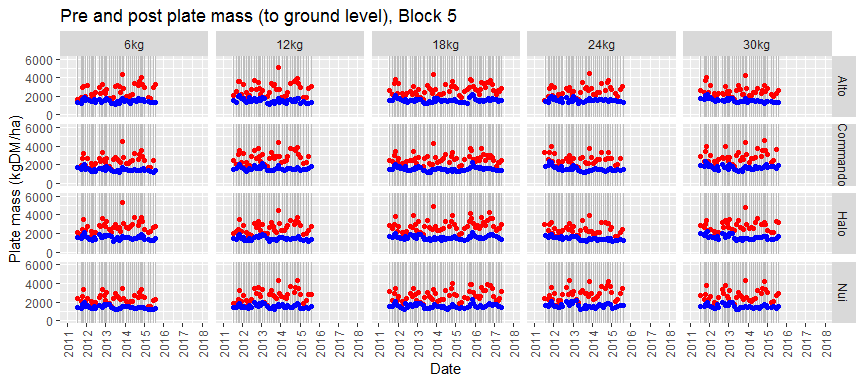
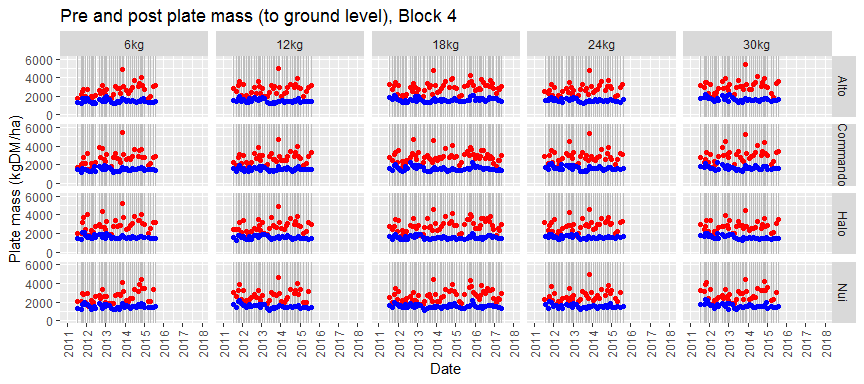
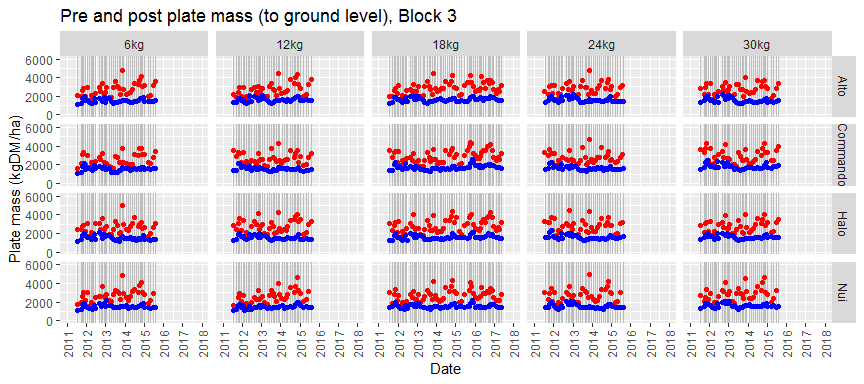
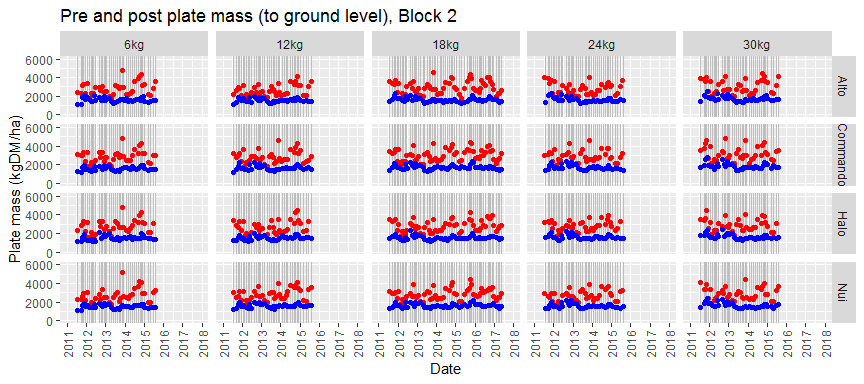
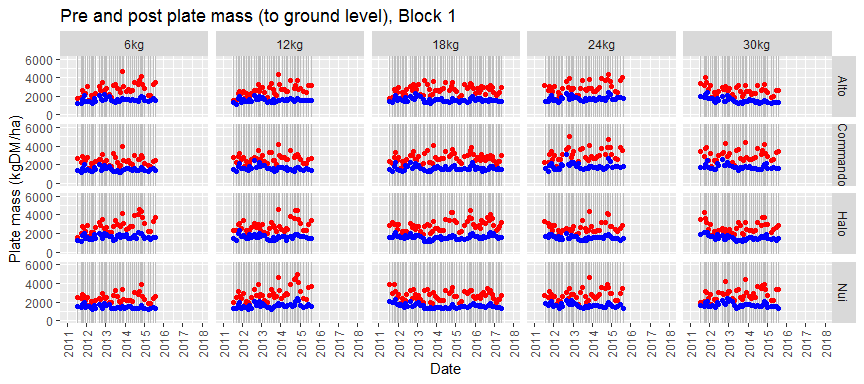
## Lincoln Data

# file name  
infile\_name <- 'FD1004\_N Data For Modelling.xlsx'  
  
# seed rates in order  
seed\_rate\_levels <- c('6kg', '12kg', '18kg', '24kg', '30kg')

## Rising Plate Meter

Average pre-graze mass = 2765

Average post-graze mass = 1592

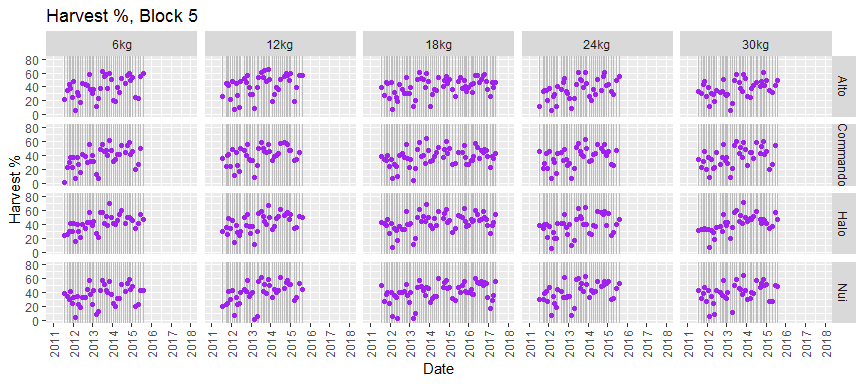
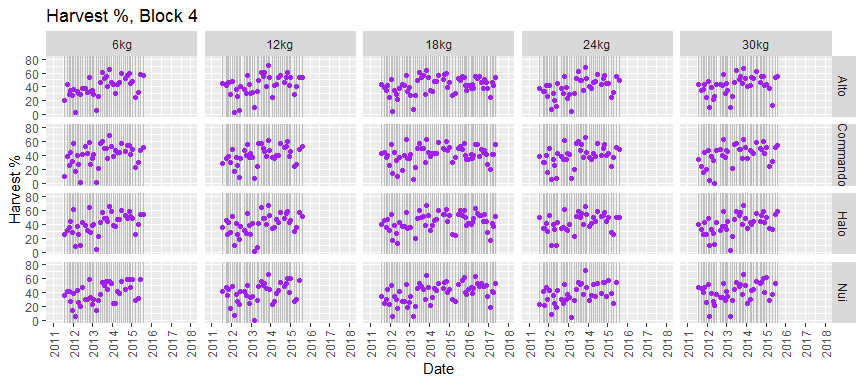
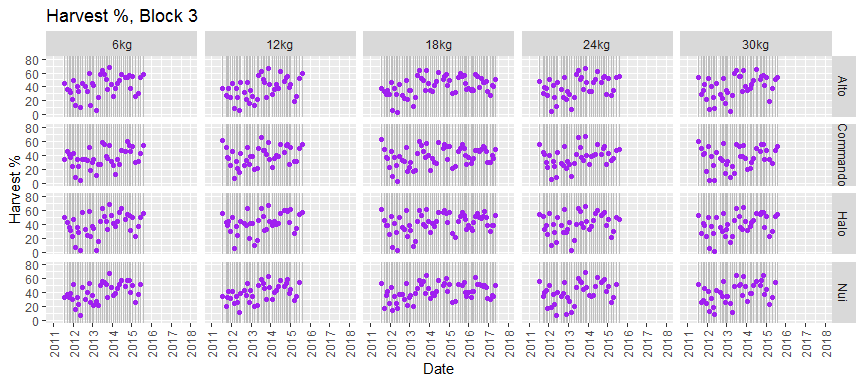
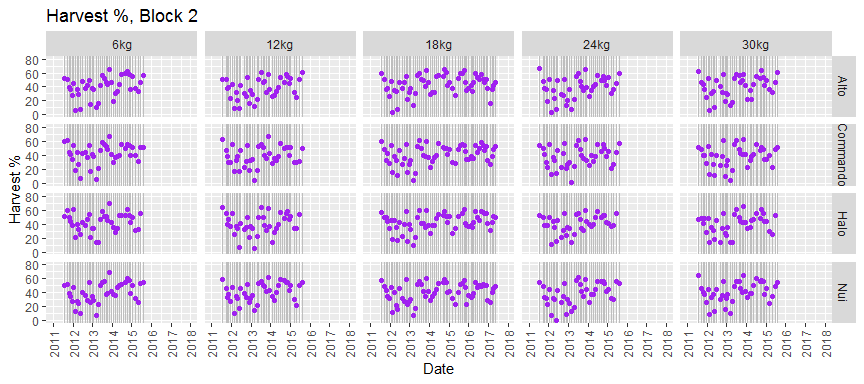
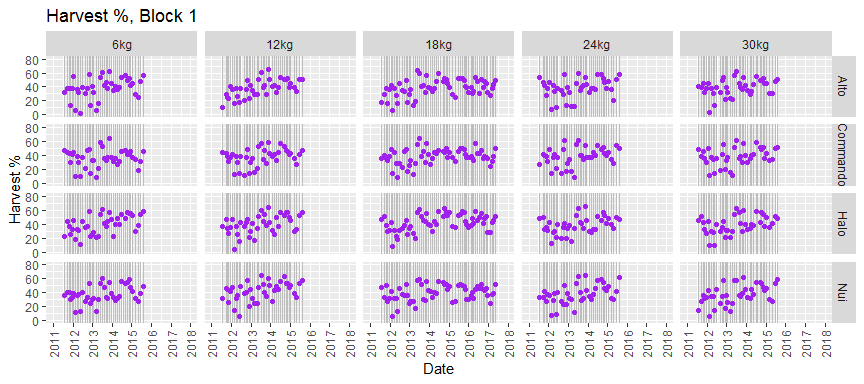


## Rising Plate Meter Harvest %

### Assumptions

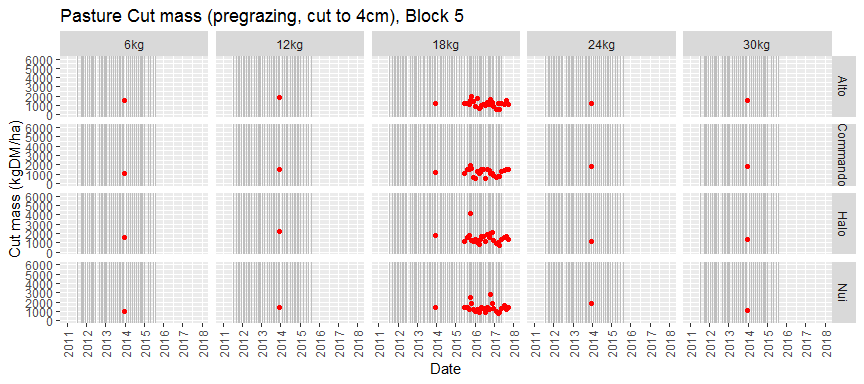
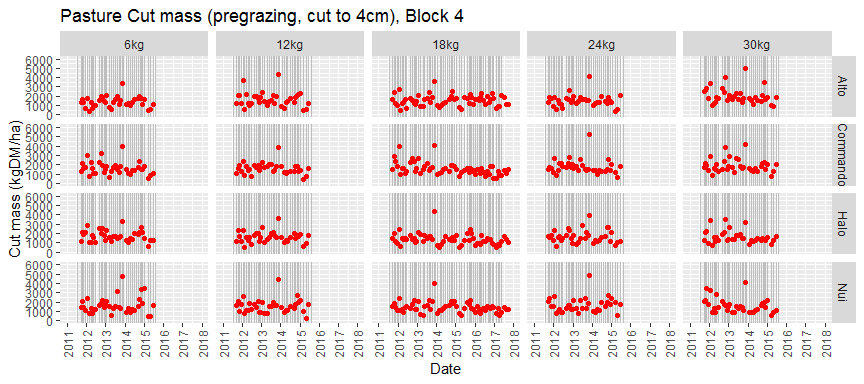
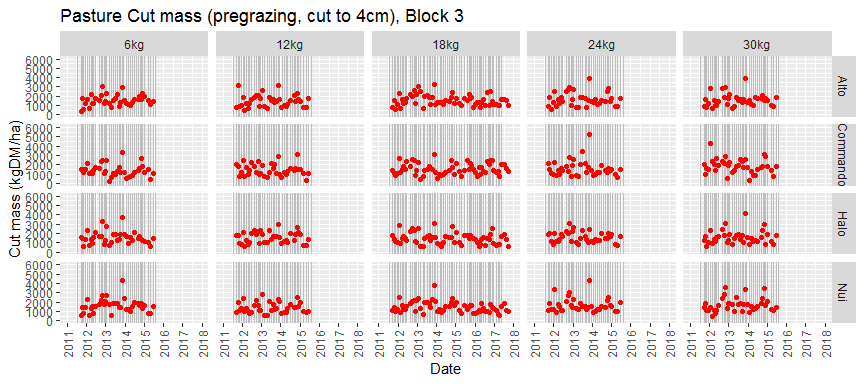
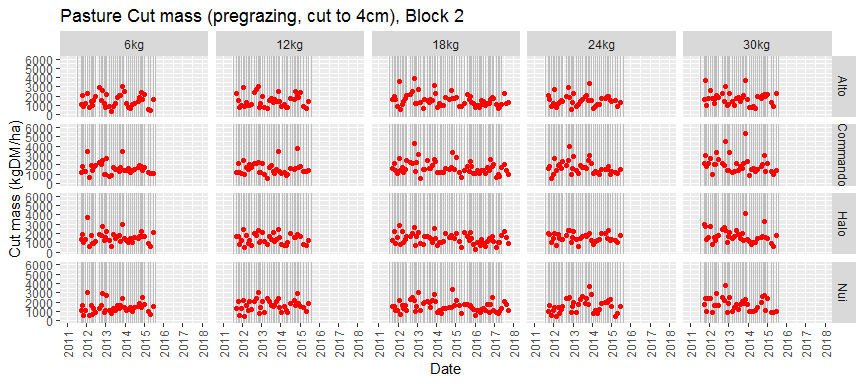
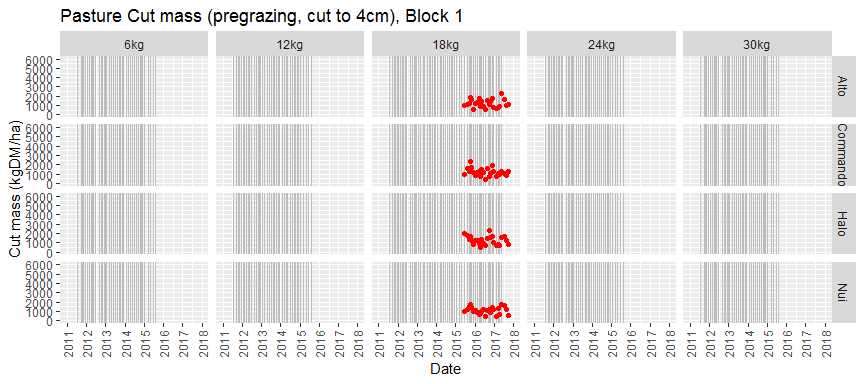
* Assume no pasture growth between pre and post RPM.

Average harvest % = 40



## Pasture Cut Mass

Average cut mass = 1556

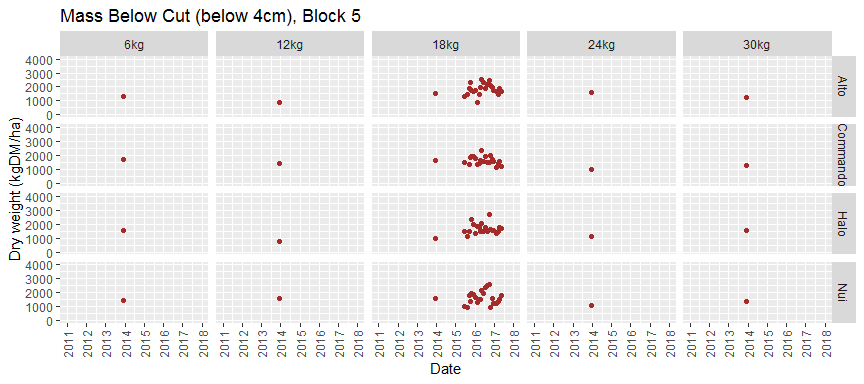
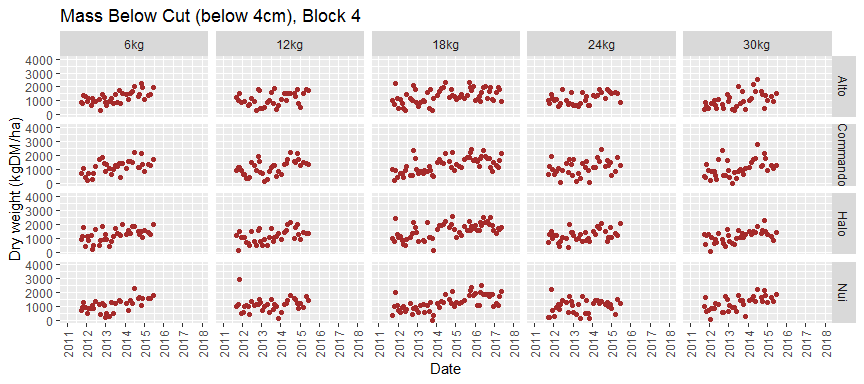
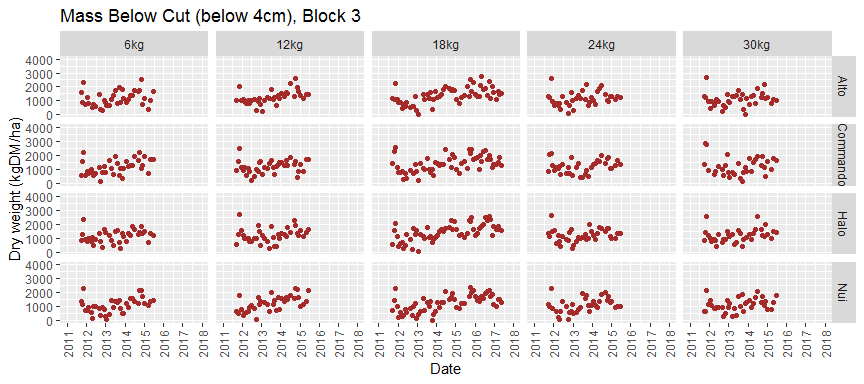
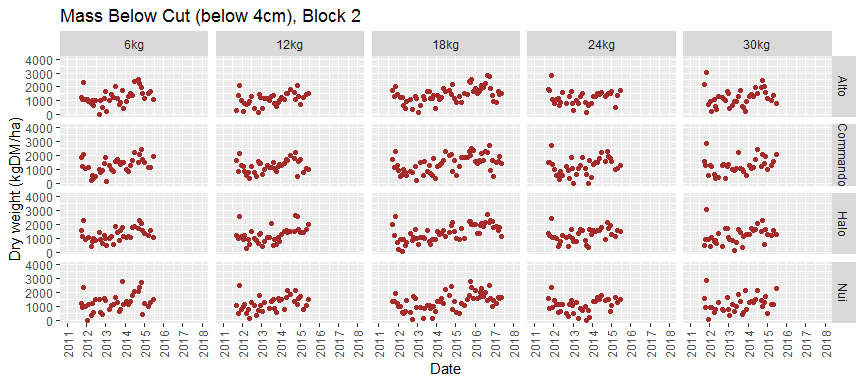
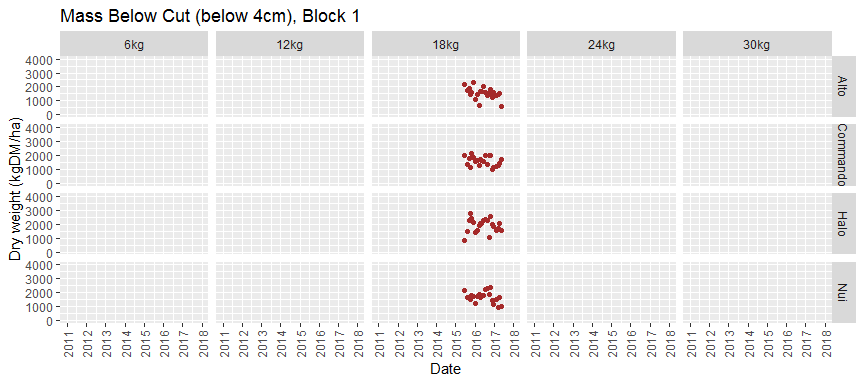


## Estimate Mass Below Cutting Height

### Assumptions

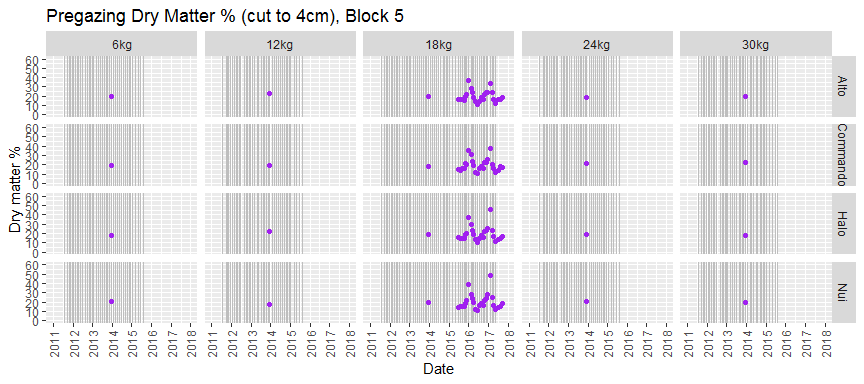
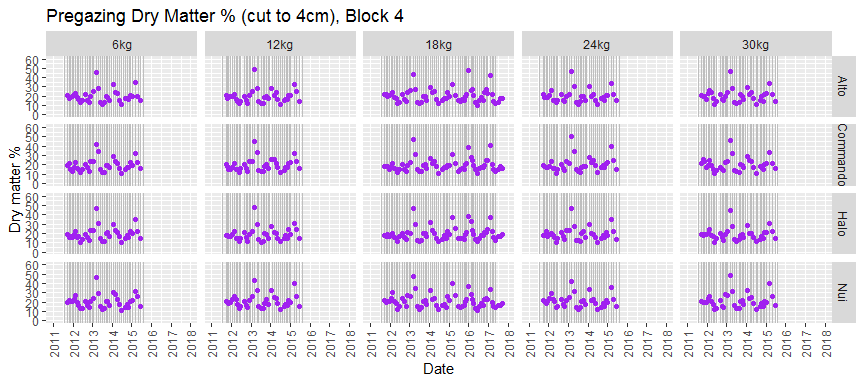
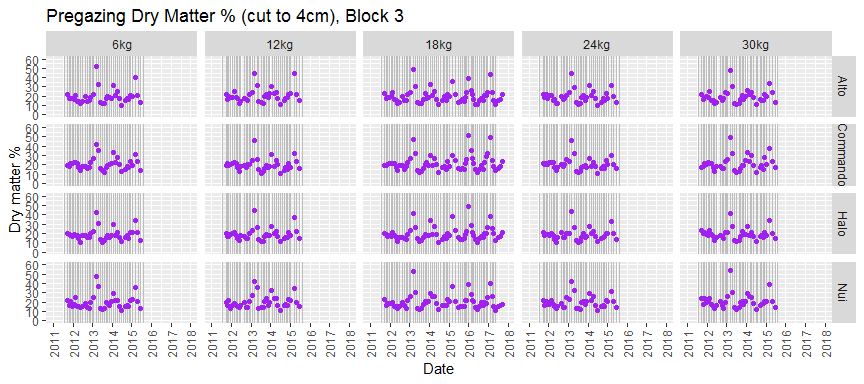
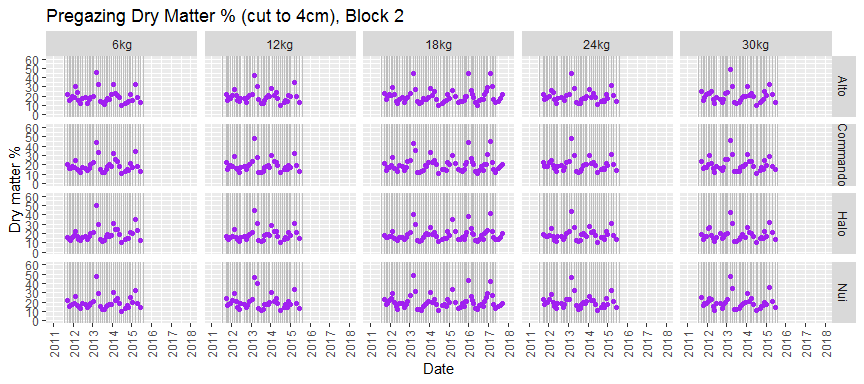
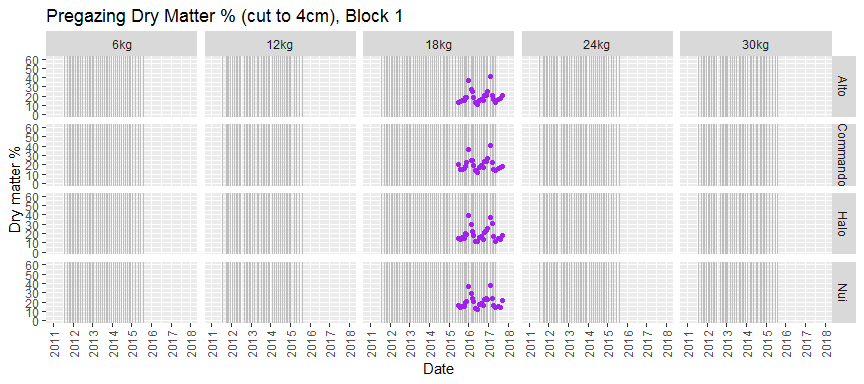
* Total mass at cutting assumed to be equal to pregraze RPM.

Average mass below cutting estimate = 1238



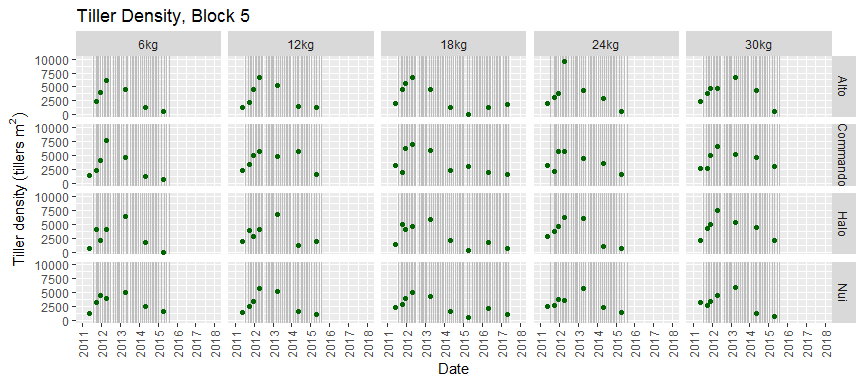
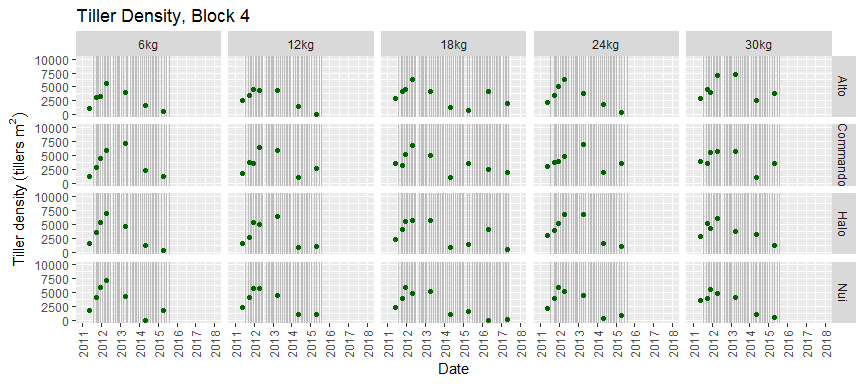
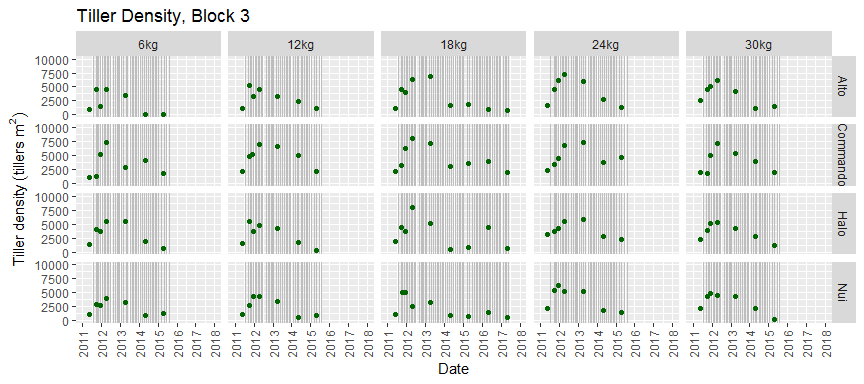
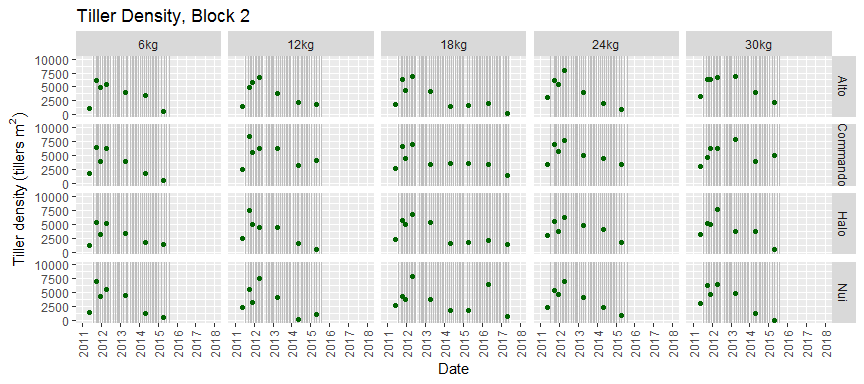
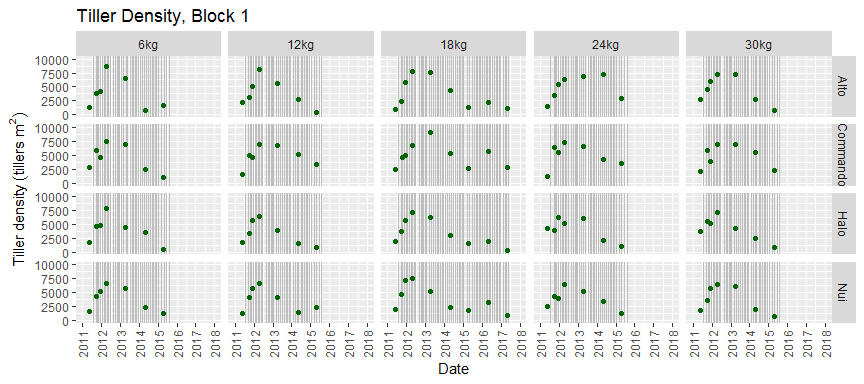
## Pasture Cuts DM%

Average cut dry matter % = 20



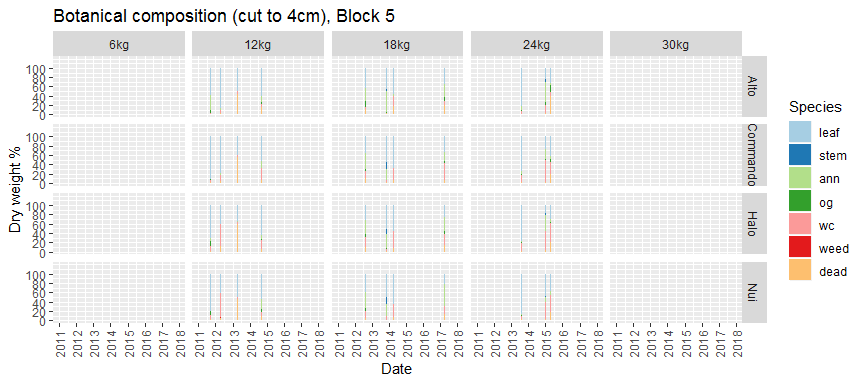
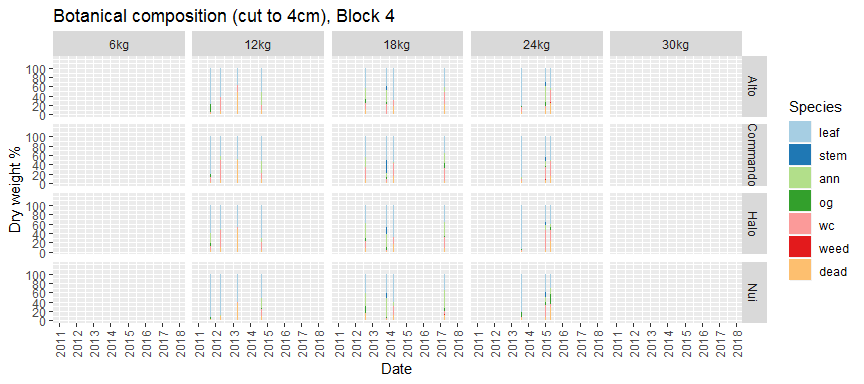
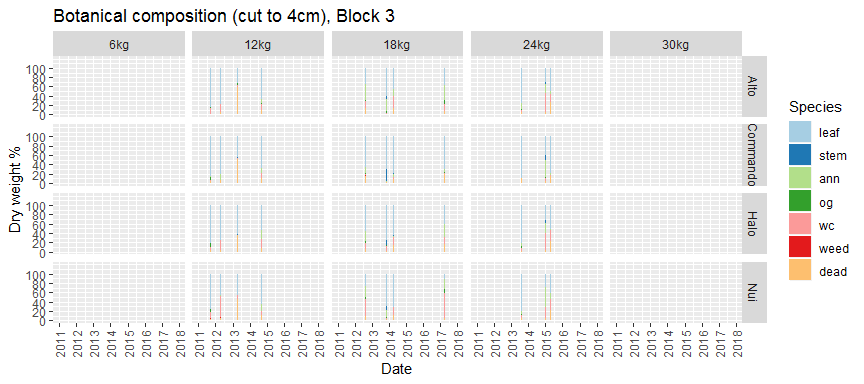
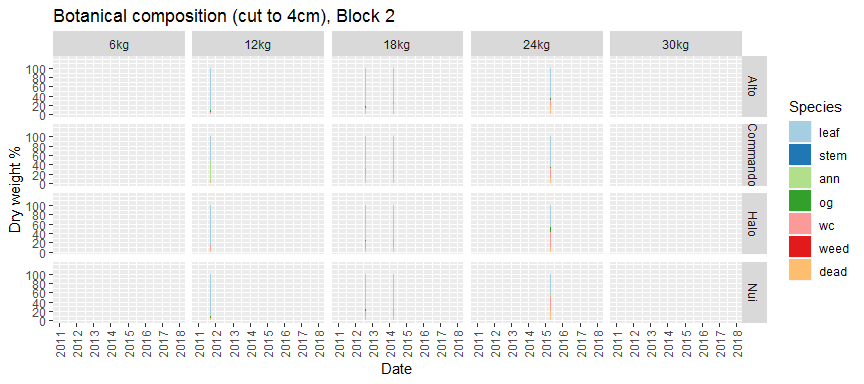
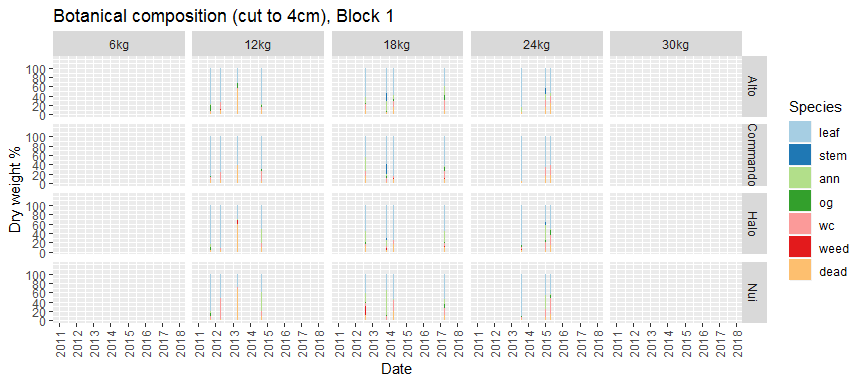
## Tiller Density

Average tiller density = 3688



## Botanical Composition

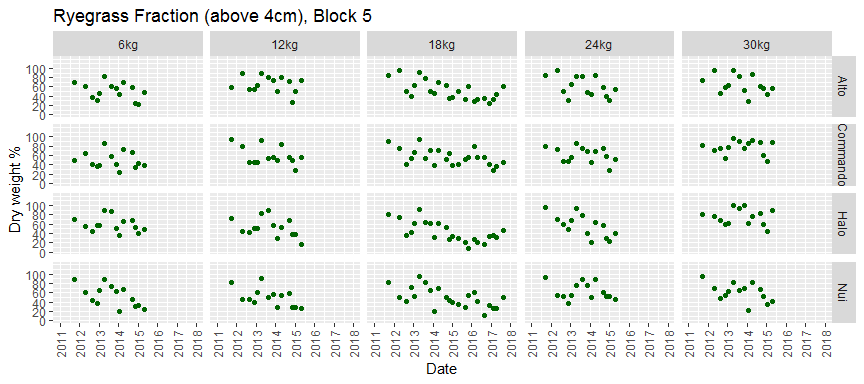
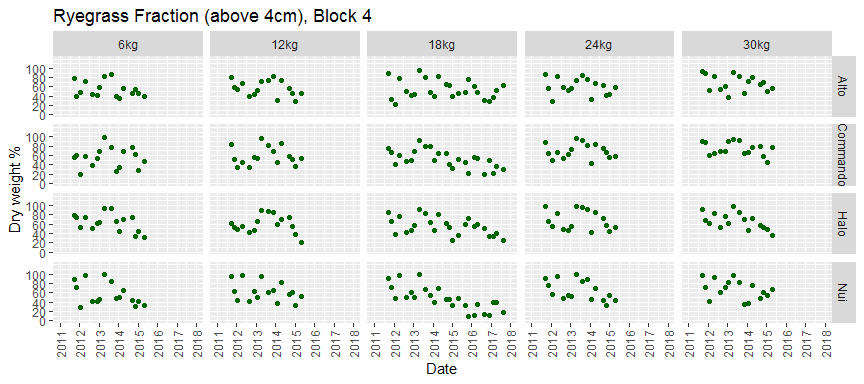
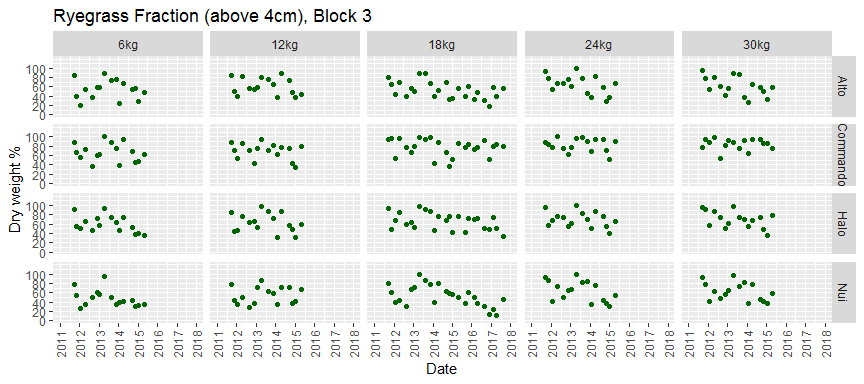
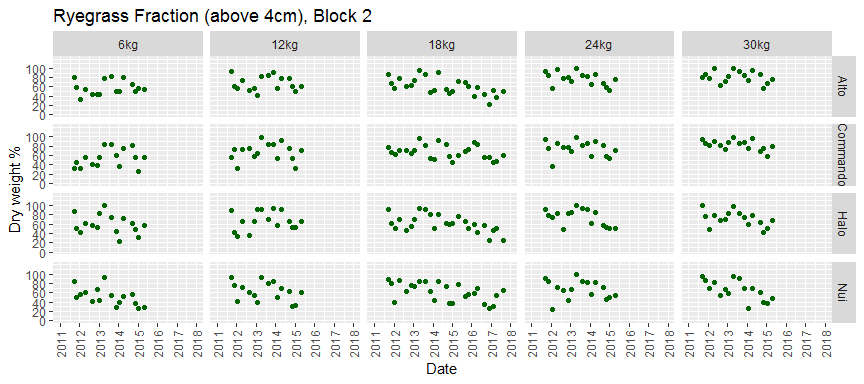
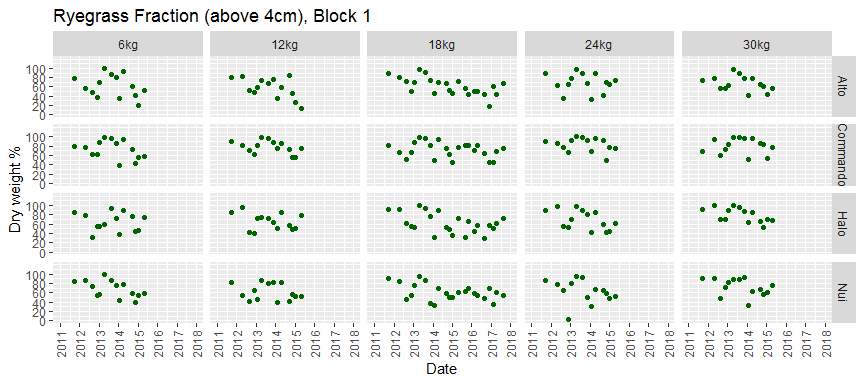
* FIXME This plot isn’t showing all data and I don’t know why



## Ryegrass Fraction

### Assumptions

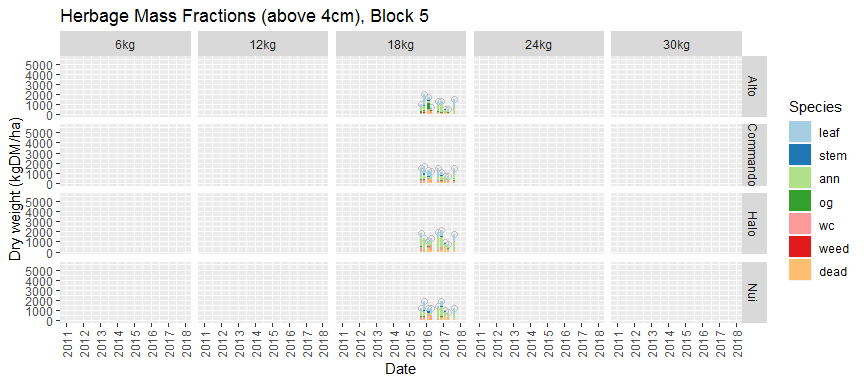
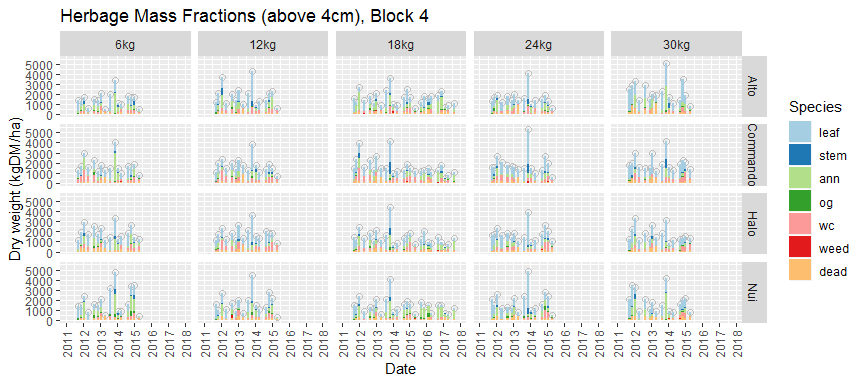
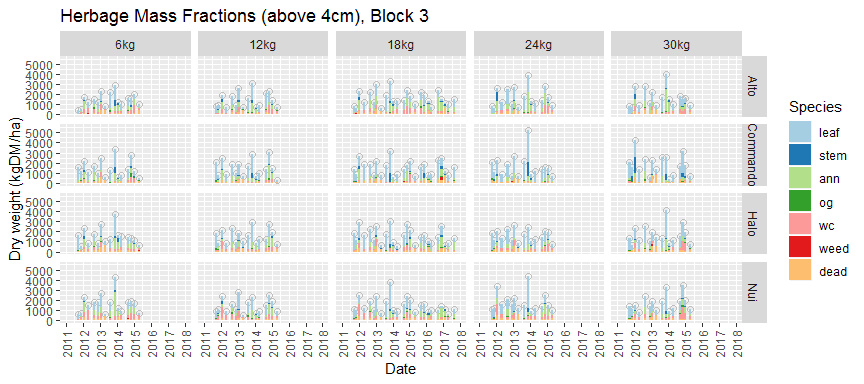
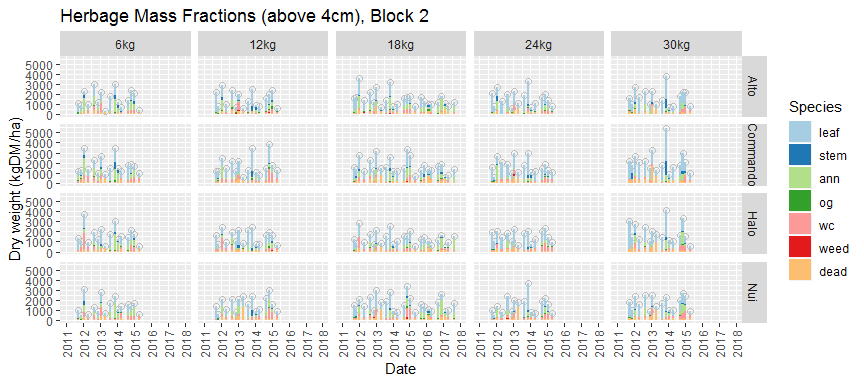
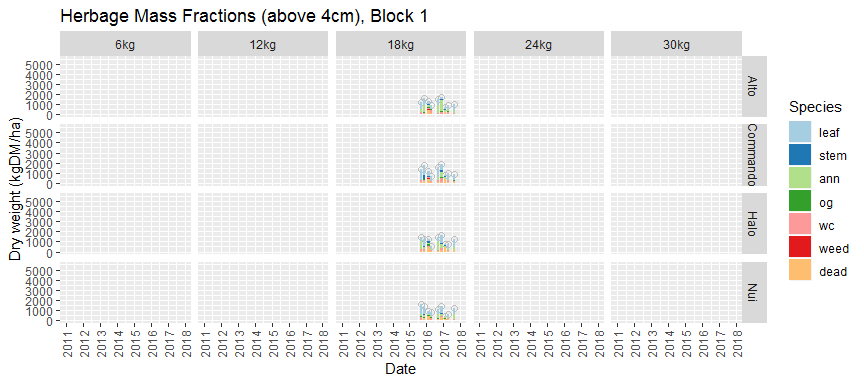
* Ryegrass fraction calculated on green mass only.



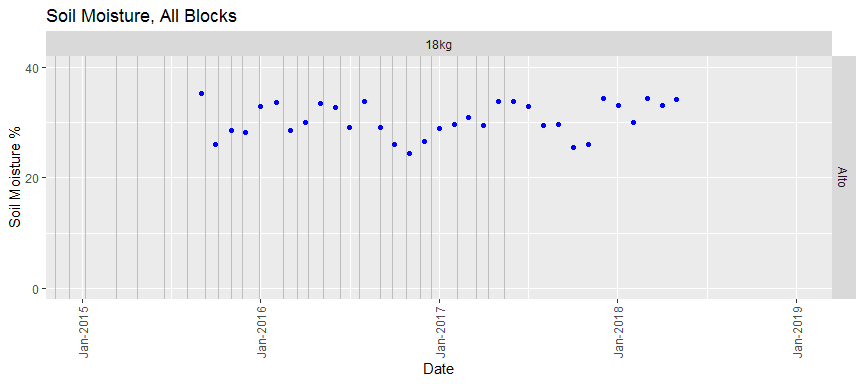
## Estimate Botancial Mass

### Assumptions

* Total mass at botanical date assumed to be equal to pregraze RPM.
* Cut mass at botanical date assumed to be equal to cut yield.
* Botanical composition below cutting height estimated from Tozer data.



## Soil Moisture



## Write Harvest Dates and Data for Model Calibration