pewhe\_2022summary.R

pukab001

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filename <- "2022 winterkill + yield notes - Sheet1.csv"  
  
read.csv(filename) -> dat  
  
library(tidyverse)

## ── Attaching packages ─────────────────────────────────────── tidyverse 1.3.2 ──  
## ✔ ggplot2 3.4.0 ✔ purrr 0.3.5   
## ✔ tibble 3.1.8 ✔ dplyr 1.0.10  
## ✔ tidyr 1.2.1 ✔ stringr 1.4.1   
## ✔ readr 2.1.3 ✔ forcats 0.5.2   
## ── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──  
## ✖ dplyr::filter() masks stats::filter()  
## ✖ dplyr::lag() masks stats::lag()

# At end of july, we were instructed to put bird protection  
  
# At this point, it was clear plots in ranges 1 and 2 were not going to yield  
# anything because the plants had died from standing water in spring and still  
# didn't have much growth/seed   
  
# I decided to just harvest whatever seedheads I could from these plots and mow  
# them down prior to putting up bird fence since there's no point in protecting  
# plots that don't really have any seed  
  
# plots not harvested on 27Jul were plots that didn't have winterkill and might  
# produce useful data  
  
dat %>%   
 # glimpse()  
 filter(harvested27Jul=="n") -> dat2  
  
# Rabbits also started "timbering" the wheat plants by chewing at the stem. When  
# every plot was fully dried down, we harvested every plot with 3 row lengths of  
# 24". Some plots did not have enough grain to do this, these plots were marked  
# as okyield="y"  
  
  
dat2 %>%   
 # glimpse()  
 filter(okyield18Aug == "y") %>%   
 group\_by(variety.code) %>%   
 tally()

## # A tibble: 9 × 2  
## variety.code n  
## <int> <int>  
## 1 2 1  
## 2 4 2  
## 3 5 3  
## 4 6 1  
## 5 7 3  
## 6 8 2  
## 7 12 2  
## 8 13 1  
## 9 14 1

# we only have yields for 9 of the 14 varieties that we could compute to an  
# kg/ha basis  
  
# this does show that varities 5 and 7 performed well in our environment. Likely  
# they were later to mature so missed out on bird damage and rabbit damage  
  
# we can compute seed data for all varieties  
  
# how should we handle this data?