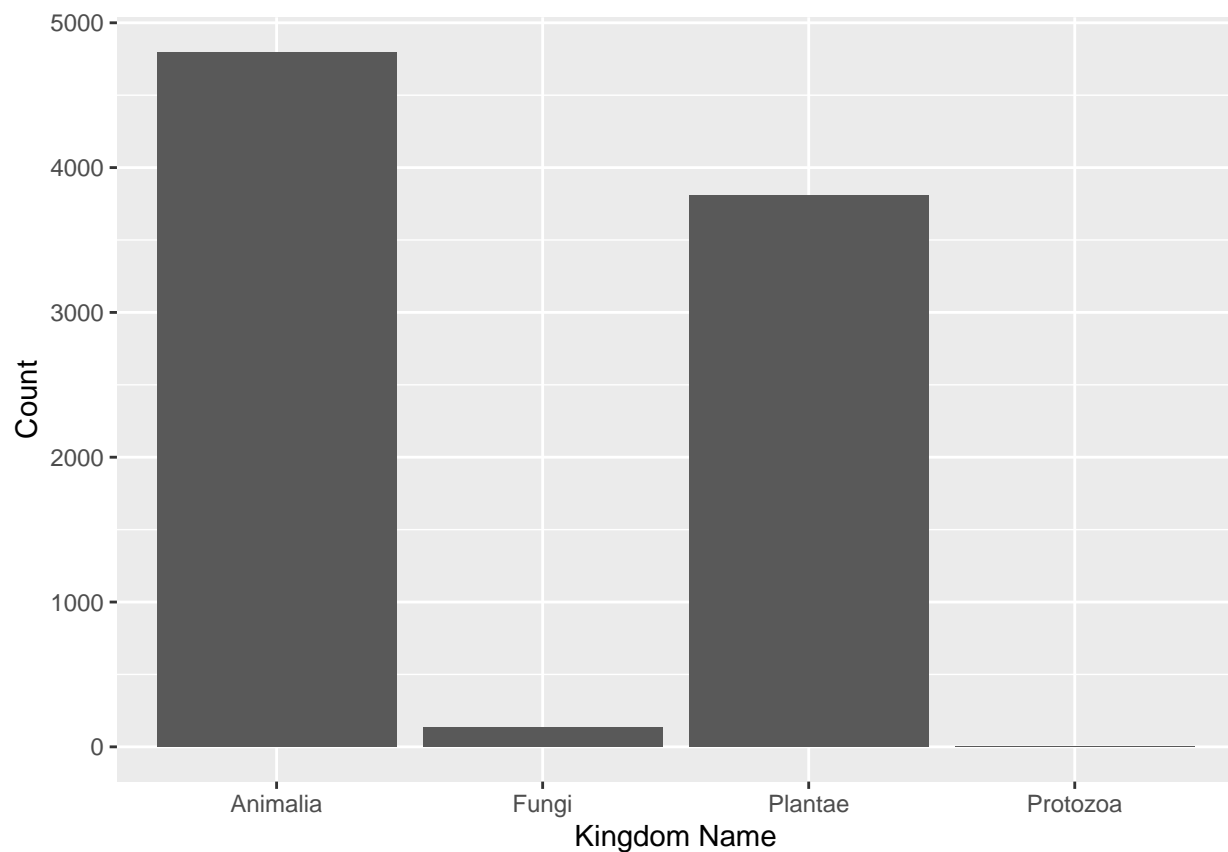


bassinat

Lindsey Weyant

12/2/2021

```
inat%>%  
  ggplot(aes(x = taxon_kingdom_name)) +  
  geom_bar() +  
  labs(x = "Kingdom Name", y = "Count", Title = "Kingdoms of the ECWA Watershed")
```



```
inatfungi <- inat %>%  
  filter(taxon_kingdom_name == "Fungi")
```

```
inatfungi %>%  
  count(scientific_name)
```

```
## # A tibble: 68 x 2  
##   scientific_name      n  
##   <chr>          <int>  
## 1 Amanita flavoconia      2
```

```
## 2 Amanita flavorubens      1
## 3 Amanita parcivolvata    1
## 4 Amanita persicina       1
## 5 Amanita rubescens       1
## 6 Apioperdon pyriforme    2
## 7 Aureoboletus betula     3
## 8 Auricularia americana   1
## 9 Baeospora myosura       1
## 10 Cantharellus cinnabarinus 2
## # ... with 58 more rows
```

```
inatprotozoa <- inat %>%
  filter(taxon_kingdom_name == "Protozoa")
```

```
inatprotozoa %>%
  count(scientific_name)
```

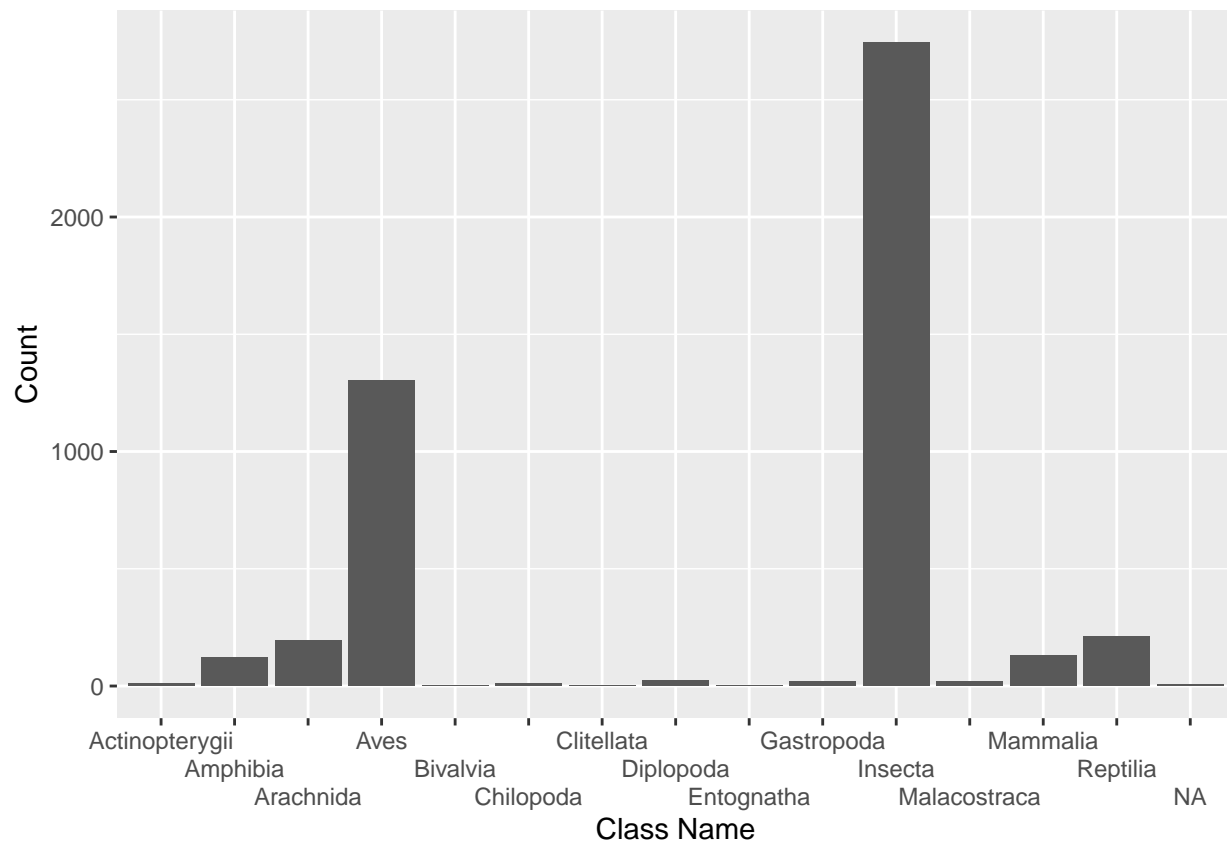
```
## # A tibble: 3 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Diachea leucopodia    1
## 2 Fuligo septica        3
## 3 Lycogala epidendrum    1
```

```
inatanimalia <- inat %>%
  filter(taxon_kingdom_name == "Animalia")
```

```
inatanimalia %>%
  count(scientific_name, sort=TRUE)
```

```
## # A tibble: 974 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Cardinalis cardinalis    75
## 2 Turdus migratorius      58
## 3 Buteo lineatus          56
## 4 Thryothorus ludovicianus 50
## 5 Papilio polyxenes       45
## 6 Danaus plexippus        43
## 7 Sciurus carolinensis    43
## 8 Storeria dekayi         43
## 9 Xylocopa virginica       43
## 10 Argiope aurantia        39
## # ... with 964 more rows
```

```
inatanimalia %>%
  ggplot(aes(x=taxon_class_name)) +
  geom_bar() +
  scale_x_discrete(guide = guide_axis(n.dodge=3)) +
  labs(x= "Class Name", y = "Count", Title = "Animalia Observations by Class")
```



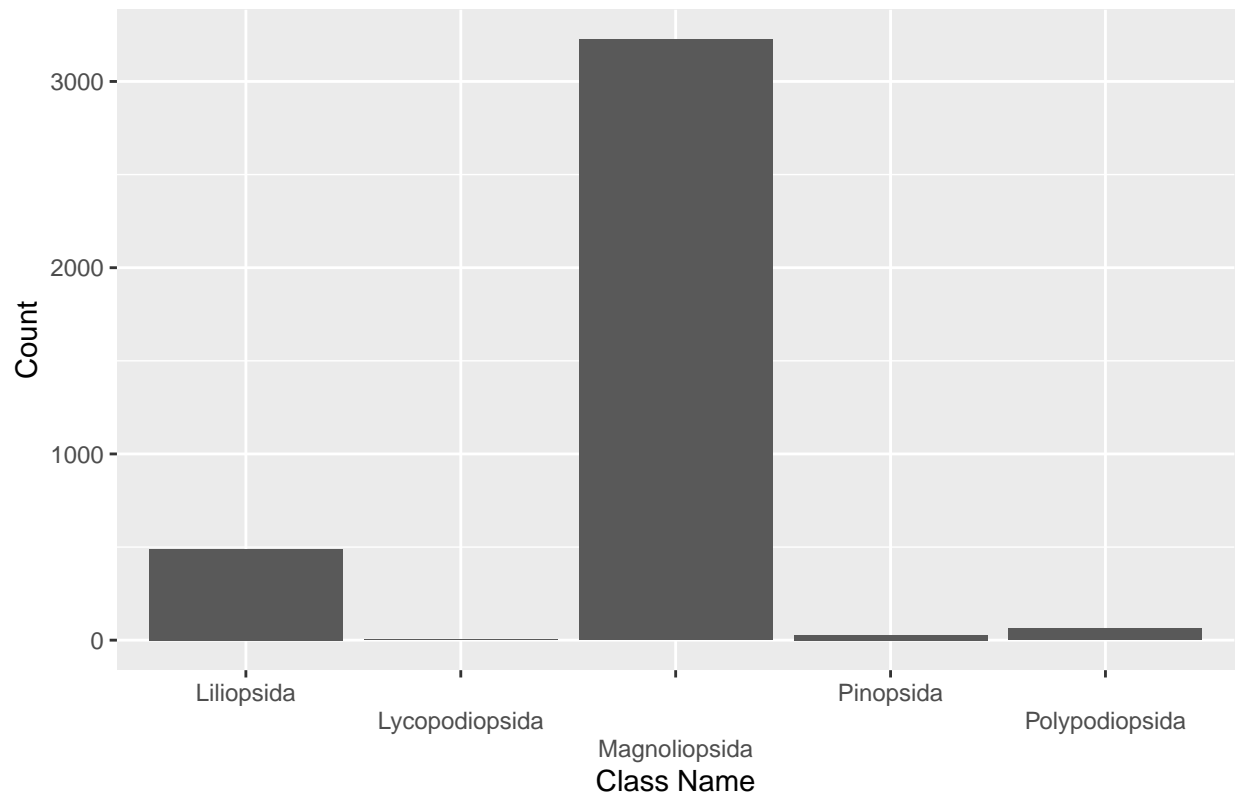
```
inatplantae <- inat %>%
  filter(taxon_kingdom_name == "Plantae")
```

```
inatplantae %>%
  count(scientific_name)
```

```
## # A tibble: 607 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Abelmoschus esculentus    1
## 2 Acalypha hispida         1
## 3 Acalypha rhomboidea      1
## 4 Acer buergerianum         1
## 5 Acer floridanum          9
## 6 Acer negundo             24
## 7 Acer palmatum            2
## 8 Acer rubrum              12
## 9 Acer saccharinum         2
## 10 Acer saccharum           1
## # ... with 597 more rows
```

```
inatplantae %>%
  ggplot(aes(x=taxon_class_name)) +
  geom_bar() +
  scale_x_discrete(guide = guide_axis(n.dodge=3)) +
  labs(x= "Class Name", y = "Count", title = "Plantae Observations by Class")
```

Plantae Observations by Class



```
inatanimalia %>%
  filter(taxon_class_name == "Insecta") %>%
  count(scientific_name, sort = TRUE)
```

```
## # A tibble: 719 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Papilio polyxenes    45
## 2 Danaus plexippus    43
## 3 Xylocopa virginica   43
## 4 Harmonia axyridis    39
## 5 Bombus impatiens    34
## 6 Papilio glaucus     34
## 7 Plathemis lydia     33
## 8 Junonia coenia       28
## 9 Phyciodes tharos    28
## 10 Alaus oculatus       26
## # ... with 709 more rows
```

```
inatanimalia %>%
  filter(taxon_class_name == "Aves") %>%
  count(scientific_name, sort = TRUE)
```

```
## # A tibble: 120 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Cardinalis cardinalis 75
```

```
## 2 Turdus migratorius      58
## 3 Buteo lineatus          56
## 4 Thryothorus ludovicianus 50
## 5 Setophaga coronata      39
## 6 Spinus tristis          39
## 7 Ardea herodias          36
## 8 Sayornis phoebe         35
## 9 Dryobates pubescens     32
## 10 Mimus polyglottos      30
## # ... with 110 more rows
```

```
inatplantae %>%
  filter(taxon_class_name == "Magnoliopsida") %>%
  count(scientific_name, sort = TRUE)
```

```
## # A tibble: 489 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Alliaria petiolata   111
## 2 Ficaria verna       107
## 3 Impatiens capensis   91
## 4 Phytolacca americana 63
## 5 Liriodendron tulipifera 62
## 6 Hedera helix         61
## 7 Ligustrum sinense    61
## 8 Toxicodendron radicans 54
## 9 Liquidambar styraciflua 52
## 10 Sassafras albidum    51
## # ... with 479 more rows
```

```
inatplantae %>%
  filter(taxon_class_name == "Liliopsida") %>%
  count(scientific_name, sort = TRUE)
```

```
## # A tibble: 95 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Microstegium vimineum 139
## 2 Arisaema triphyllum   28
## 3 Smilax rotundifolia   23
## 4 Commelina communis    18
## 5 Allium vineale         16
## 6 Dioscorea polystachya 16
## 7 Chasmanthium latifolium 14
## 8 Tipularia discolor    11
## 9 Lycoris radiata       10
## 10 Iris pseudacorus       9
## # ... with 85 more rows
```

```
inatanimalia %>%
  filter(taxon_class_name == "Amphibia") %>%
  count(scientific_name, sort = TRUE)
```

```
## # A tibble: 14 x 2
##   scientific_name      n
##   <chr>              <int>
```

```
## 1 Lithobates palustris      23
## 2 Hyla chrysoscelis         20
## 3 Acris crepitans           17
## 4 Hyla cinerea              16
## 5 Lithobates catesbeianus   13
## 6 Lithobates clamitans      9
## 7 Anaxyrus americanus       7
## 8 Ambystoma opacum          4
## 9 Eurycea cirrigera         3
## 10 Anaxyrus fowleri          2
## 11 Lithobates sphenoccephalus 2
## 12 Notophthalmus viridescens 2
## 13 Pseudacris crucifer      2
## 14 Pseudacris feriarum      1
```

```
inatanimalia %>%
  filter(taxon_class_name == "Reptilia") %>%
  count(scientific_name, sort = TRUE)
```

```
## # A tibble: 29 x 2
##   scientific_name      n
##   <chr>              <int>
## 1 Storeria dekayi      43
## 2 Anolis carolinensis  25
## 3 Haldea striatula     22
## 4 Pantherophis alleghaniensis 18
## 5 Agkistrodon contortrix 14
## 6 Scincella lateralis  13
## 7 Trachemys scripta    13
## 8 Chelydra serpentina   8
## 9 Thamnophis sirtalis   7
## 10 Carphophis amoenus    6
## # ... with 19 more rows
```