What's a Bark?

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Faculty Data Practicum

Bring in the `Voyages` data:

```
load("Voyages.rda")
```

What are the kinds of vessels?

```
Voyages %>% group_by(ship_type) %>% tally() %>%
    arrange(desc(n))
```

```
## Source: local data frame [51 x 2]
##
##        ship_type      n
##            (chr)  (int)
## 1          BARK   4988
## 2          BRIG   2802
## 3          SHIP   1020
## 4        WHALER    812
## 5      SCHOONER    578
## 6        PACKET    260
## 7   BRITISH RMS    194
## 8       BRITISH    151
## 9       CLIPPER    141
## 10      STEAMER     70
## ..           ...    ...
```

Summarise each of the voyages based on the log books:

```
load("Ship_logs.rda")
```

Need to fix this up to make speed units clearer.

```
Voyage_summary <- Ship_logs %>% group_by(voyage) %>%
    summarise(ndays = n(), north_south = n_distinct(NS) >
        1, max_speed = max(tidyr::extract_numeric(speednum)))
```

Add the ship types to the voyage summary:

```
Joined <- Voyages %>% select(voyage, ship_type) %>%
    group_by(ship_type) %>% filter(n() > 200) %>%
    left_join(Voyage_summary, by = c(voyage = "voyage"))
```

```
Joined %>% ggplot(aes(x = ndays, fill = ship_type)) +
    geom_density(position = "stack") + scale_x_log10() +
    facet_wrap(~north_south)
```