Monthly Toronto shelter usage in 2020*

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Abstract

Shelter usage is an important factor in determining the livability of Toronto because of the large homeslessness population. We obtain monthly shelter usage in Toronto from the City on a demographic basis and analyze it using a graph. We find increased shelter usage in Winter, compared to summer and for younger age-groups compared with older ones. Our findings have implications for shelter constuction.

1 Introduction

First paragraph is going to be motivational and broad.

Second paragraph is about what was done and what was found.

Third paragrph about implications.

The remainder of this paper is: Section 3 explains the data. Section 5 covers results..... Section 2 discussse Adam.

2 Adam Labas

3 Data

Paragraph or two introducing the dataset broadly.

Then show an extract of the dataset (Table 1).

```
library(tidyverse)
library(knitr)
monthly_shelter_usage <-
  read_csv(here::here("inputs/data/monthly_shelter_usage.csv"))
```

```
## Rows: 180 Columns: 18
```

```
## -- Column specification --------------------------------------------------------
## Delimiter: ","
## chr  (2): date(mmm-yy), population_group
## dbl (16): _id, returned_from_housing, returned_to_shelter, newly_identified,...
```

```
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
monthly_shelter_usage |>
  select(population_group, returned_from_housing) |>
  slice(1:10) |>
```

*Code and data are available at: https://github.com/RohanAlexander/starter_folder-main-2.

Table 1: First ten rows of a dataset that shows shelter usage

Population group	Number returned from housing
All Population	64
Chronic	12
Refugees	15
Families	15
Youth	8
Single Adult	41
Non-refugees	49
All Population	76
Chronic	13
Refugees	19

```
kable(
  caption = "First ten rows of a dataset that shows shelter usage",
  col.names = c("Population group", "Number returned from housing"),
  digits = 1,
  booktabs = TRUE,
  linesep = ""
)
```

Our data is of penguins (Figure 1).

```
## Warning: It is deprecated to specify `guide = FALSE` to remove a guide. Please
## use `guide = "none"` instead.
```

Talk more about it.

Also bills and their average (Figure 2). (Notice how you can change the height and width so they don't take the whole page?)

```
## Warning: It is deprecated to specify `guide = FALSE` to remove a guide. Please
## use `guide = "none"` instead.
```

Talk way more about it.

4 Model

$$Pr(\theta|y) = \frac{Pr(y|\theta)Pr(\theta)}{Pr(y)} \tag{1}$$

Equation (1) seems useful, eh?

Here's a dumb example of how to use some references: In paper we run our analysis in `R` (R Core Team 2020). We also use the `tidyverse` which was written by Wickham et al. (2019) If we were interested in baseball data then Friendly et al. (2020) could be useful.

We can use maths by including latex between dollar signs, for instance θ.

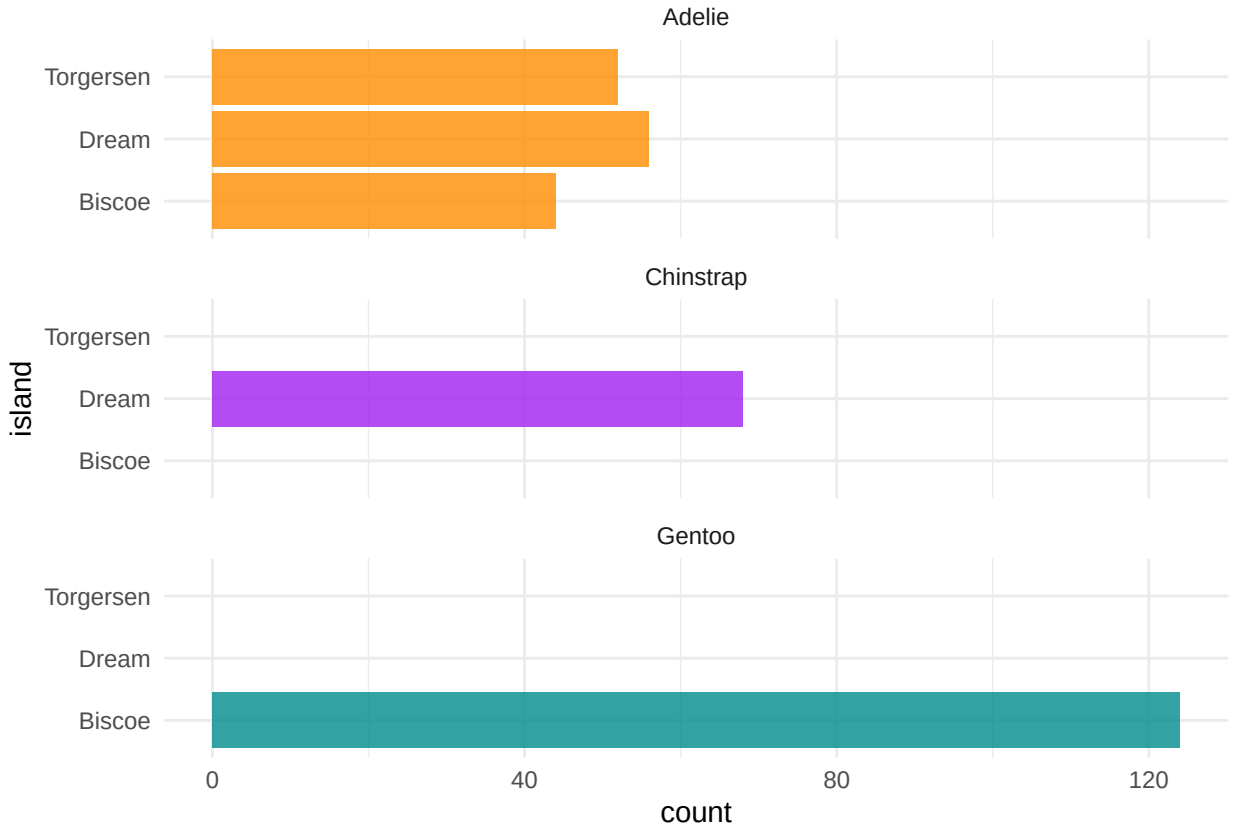

Figure 1: Bills of penguins

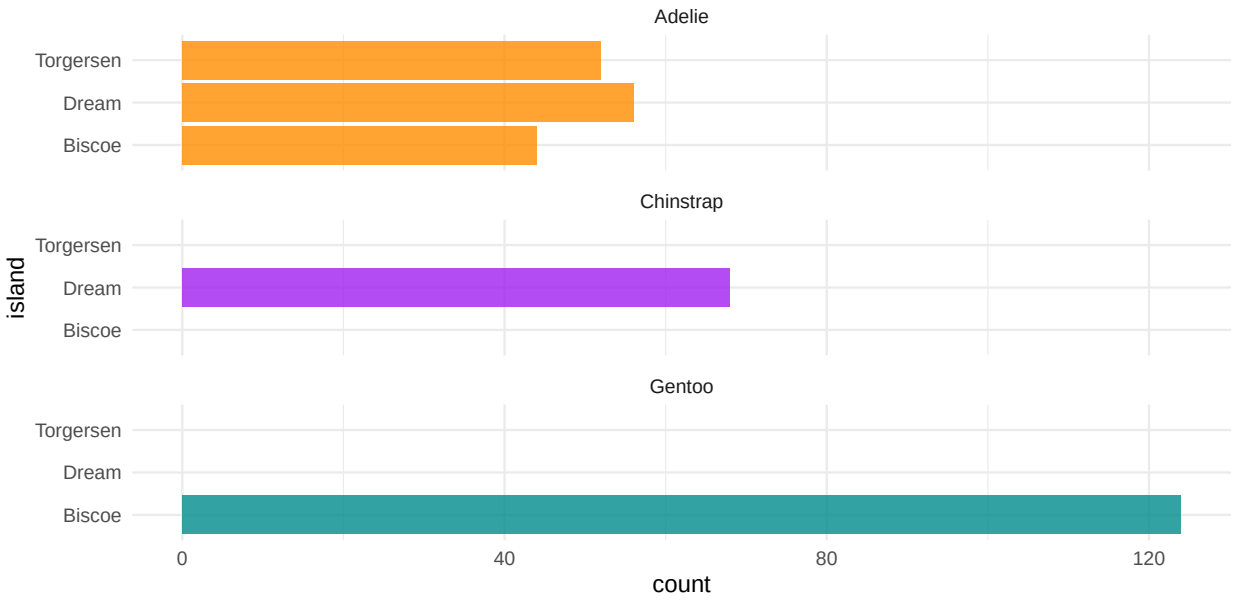

Figure 2: More bills of penguins

5 Results

6 Discussion

6.1 First discussion point

If my paper were 10 pages, then should be be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

6.2 Second discussion point

6.3 Third discussion point

6.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional details

References

Friendly, Michael, Chris Dalzell, Martin Monkman, and Dennis Murphy. 2020. *Lahman: Sean 'Lahman' Baseball Database*. https://CRAN.R-project.org/package=Lahman.

R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. "Welcome to the tidyverse." *Journal of Open Source Software* 4 (43): 1686. https://doi.org/10.21105/joss.01686.