



Due Monday, Week 13: #TidyTuesday

For this week's Program R skill building, you are going to learn more about the [#TidyTuesday challenge](#) (check out the co-founder [Thomas Mock](#) – a PhD candidate in Neuroscience!). Create a space in your Data Viz Journal for Week 13 to report on your exploration.

Section 1: Explore a previous #TidyTuesday challenge on a dataset you know well: [Palmer Penguins](#)! For your first slide, scroll through some of the submissions when this challenge ran in July 2020. There are two ways to view past submissions (you only need to look at a subset):

- 1) If you have a Twitter account, you can search #TidyTuesday penguin
- 2) And there's a Shiny app for that! Check out [tidytuesday.rocks](#) (highlighted as runner up in the 2019 Shiny Contest from R Studio). This is a set of code that extracts #TidyTuesday submissions from Twitter and organizes the contributions in an accessible web tool. And of course, the developer has shared the code on GitHub for the Shiny app, so anyone else could modify the code for the interface or web scraping functions and publish a similar tool for another purpose.

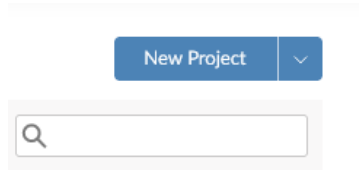
Using the dropdown box, select Palmer Penguins from the Dataset tweets and there should be over 100 submissions that can be clicked through. Remember, Shiny is a web app and this one pulls information from various links and it may take a moment to load. If it takes too long to pull in a submission, just click "Next" or a different submission number to see if another example loads better.

Review 20 – 30 submissions. What do you notice looking at these? Write a short paragraph of your impressions and screen shot some of your favorites.

Section 2 – 3: You will execute your own script in R to visualize a past #TidyTuesday dataset on whales and dolphins captive in the US between 1938 and 2017 (background on the [Cetacean Dataset](#)). Keeping these species in captivity is controversial and a complex topic (have you heard about the Blackfish documentary?). Wait to read the article where the dataset was used until *after* you have explored the data and decided on the aspect you plan to highlight, and have selected your variables and chart type. We are not expecting professional graphics, but we are expecting you to think critically about questions you can illustrate with data and the chart type that would work well for the variables you select (don't forget the whole first part of this course!). We *are* expecting adjustments on the theme and labels for a cleaner and more polished figure.

- 1) The .csv file is posted on Blackboard. You are responsible for starting a New Project space on R Studio Cloud, loading your data, installing the packages you need, calling your libraries, and finding and customizing the code for the graph type you want to use. Please

consult the resources we have provided, but also don't hesitate to make an office hours appointment for troubleshooting advice.



- 2) For slides 2 – 3, please write 1 – 2 paragraphs explaining question you decided to visualize, the variables you selected, and the decisions you made in selecting a chart type and formatting your graphic. If you use code from another resource, please note the resource(s) you used (particularly where you copied and modified code from – this is encouraged! We just want to know the sources you used).
- 3) Please include an image of your graph and a screen shot of your main section of code that produced the graph. You do not need to turn in a script or markdown file for this assignment, but please annotate your code and keep it tidy so your screen capture is clear in your Data Viz journal and we can easily take a look in R Studio Cloud if needed.

Source: Grayson, K., Hilliker, A. (2021). [Teaching Data Viz and Communication as an Undergraduate Biology Course: Assignments and Projects. Calling Bull - a resource sharing and teaching community](#), QUBES Educational Resources. [doi:10.25334/5C87-YE71](#)

Teaching materials from a co-developed for an upper-level undergraduate biology course at University of Richmond to teach data exploration and communication.