

COMM101: Data Visualization with ggplot

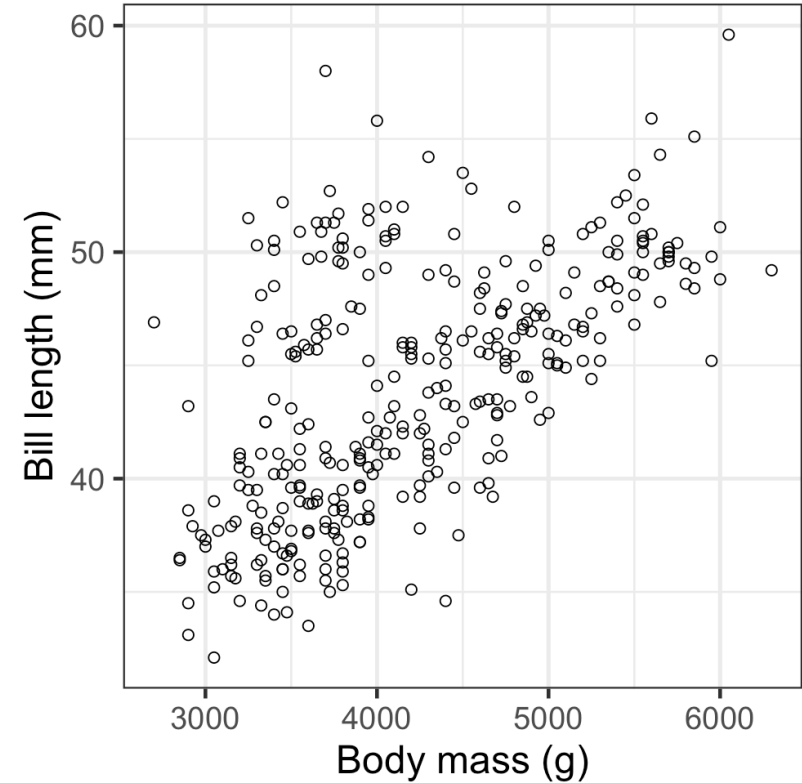
Welcome to the grammar of graphics

MARINCS 100B | Intro to Marine Data Science | Winter 2025

Key concepts

Data, mapping, and geometries

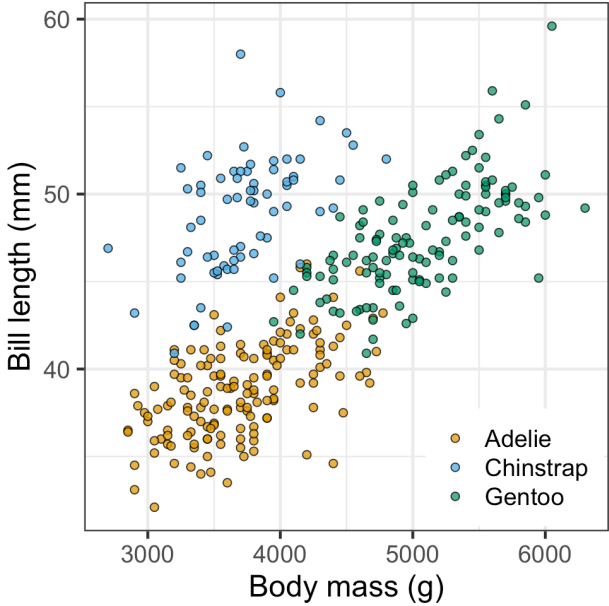
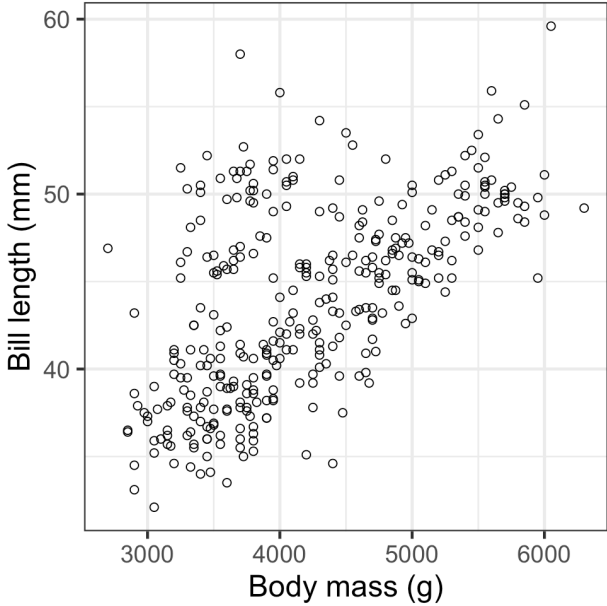
species	body_mass_g	bill_length_mm
Adelie	3750	39.1
Gentoo	5400	49.9
Chinstrap	3500	46.5



Data, mapping, and geometries

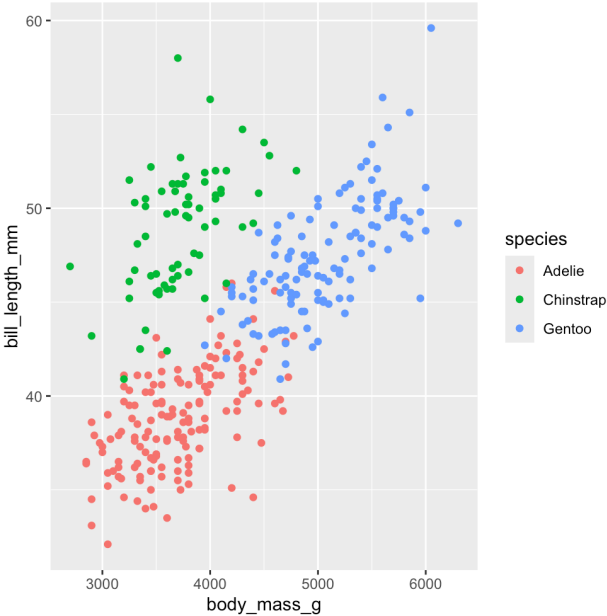
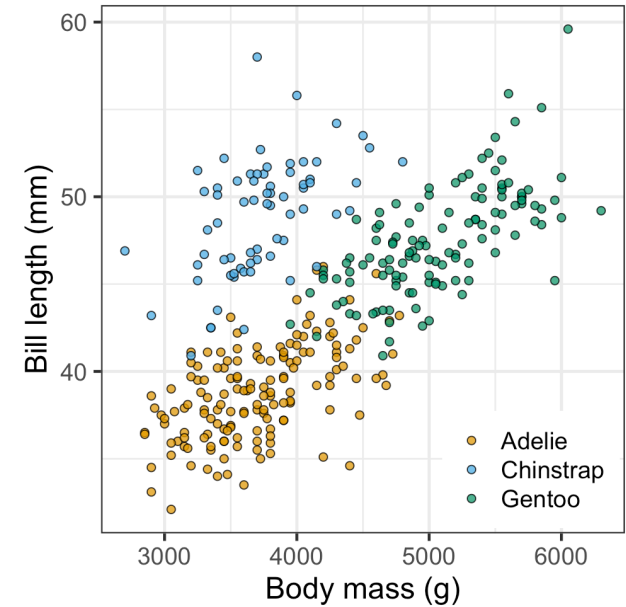
Scales and themes

species	body_mass_g	bill_length_mm
Adelie	3750	39.1
Gentoo	5400	49.9
Chinstrap	3500	46.5



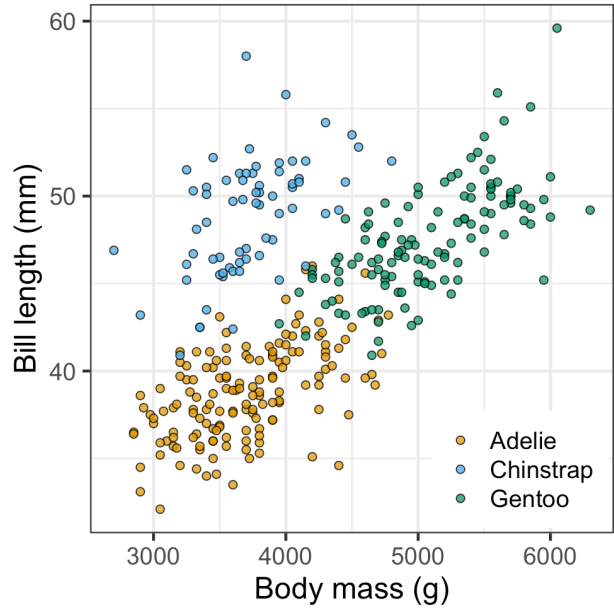
Scales and themes

Visualization best practices



Recap

species	body_mass_g	bill_length_mm
Adelie	3750	39.1
Gentoo	5400	49.9
Chinstrap	3500	46.5



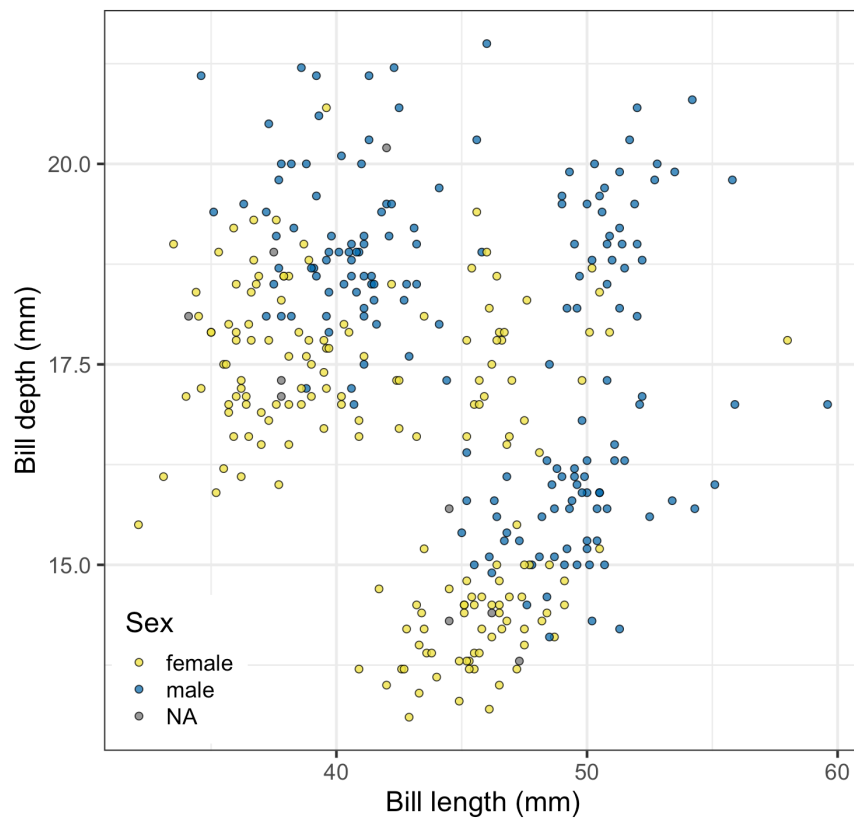
New vocabulary and lingering questions

New vocabulary

Lingering questions

Exercises

Describe the grammar of graphics components (data, geometries, mapping, scales, theme) in the figure below.



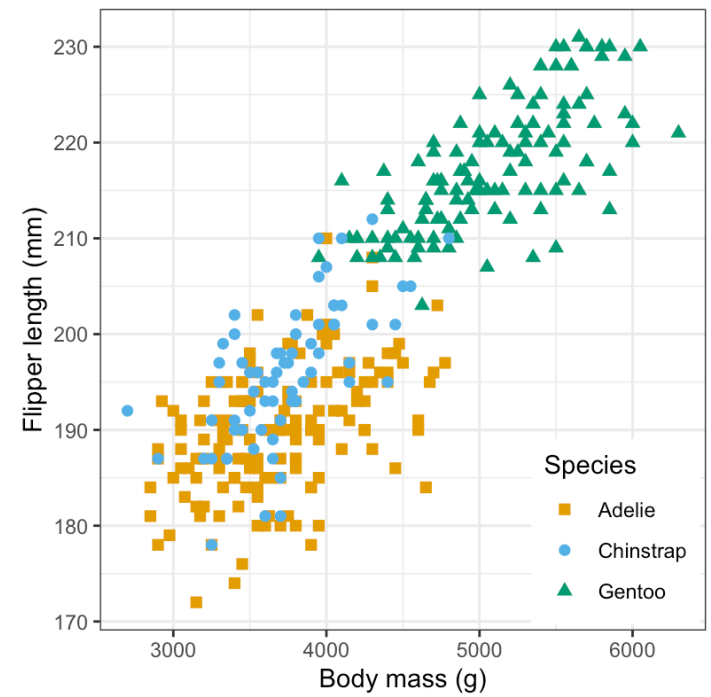
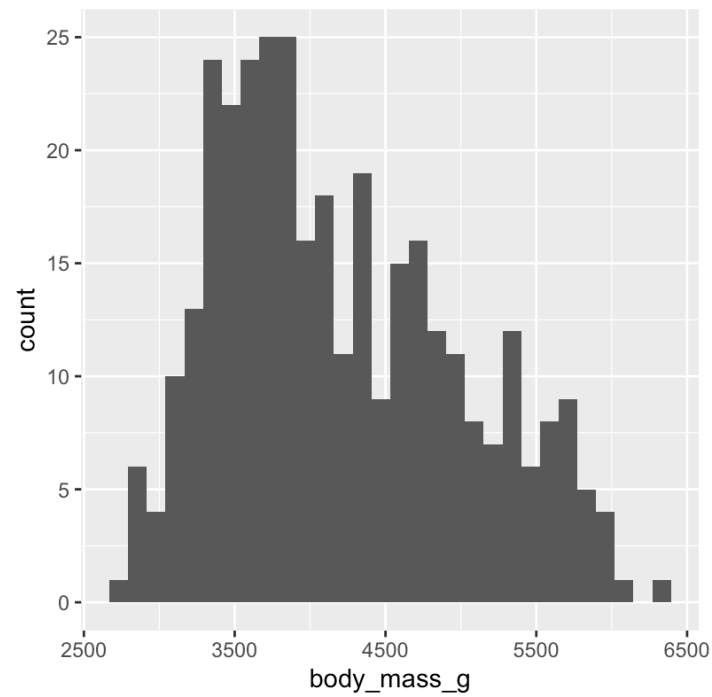
COMM101: Data Visualization with ggplot

Introducing ggplot

MARINCS 100B | Intro to Marine Data Science | Winter 2025

Key concepts

Demo in R



Recap

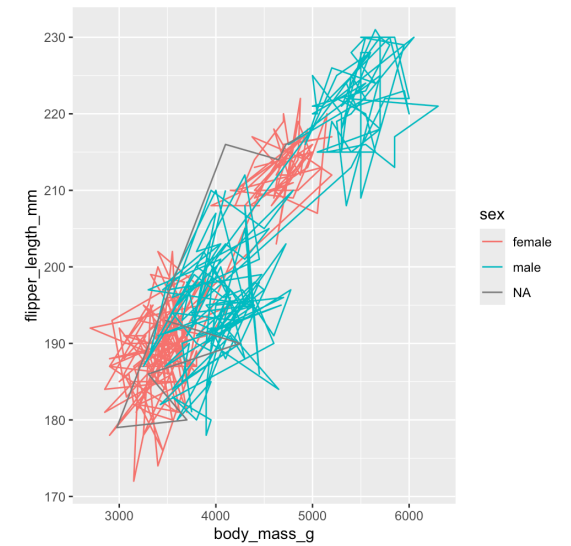
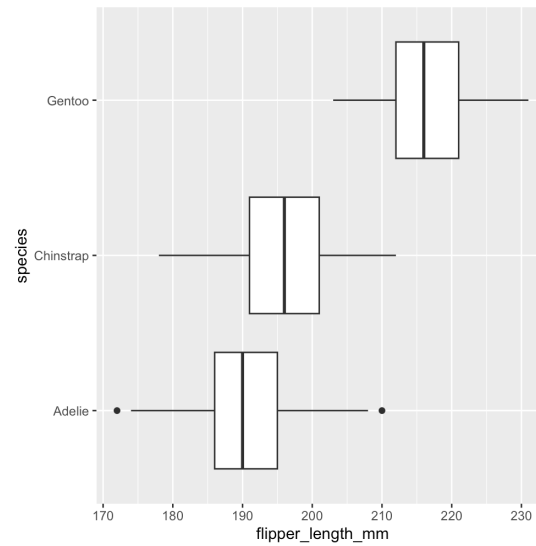
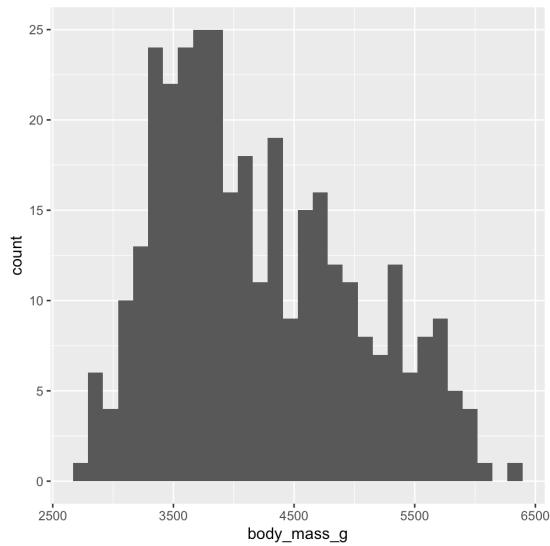
New vocabulary and lingering questions

New vocabulary

Lingering questions

Exercises

Here are three figures. Edit the code in comm101b.R so the outputs match the figures below.

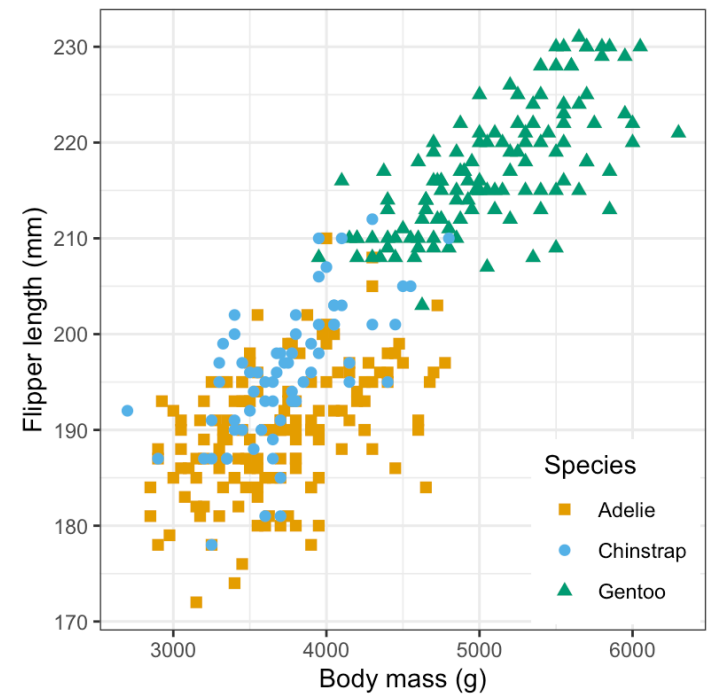
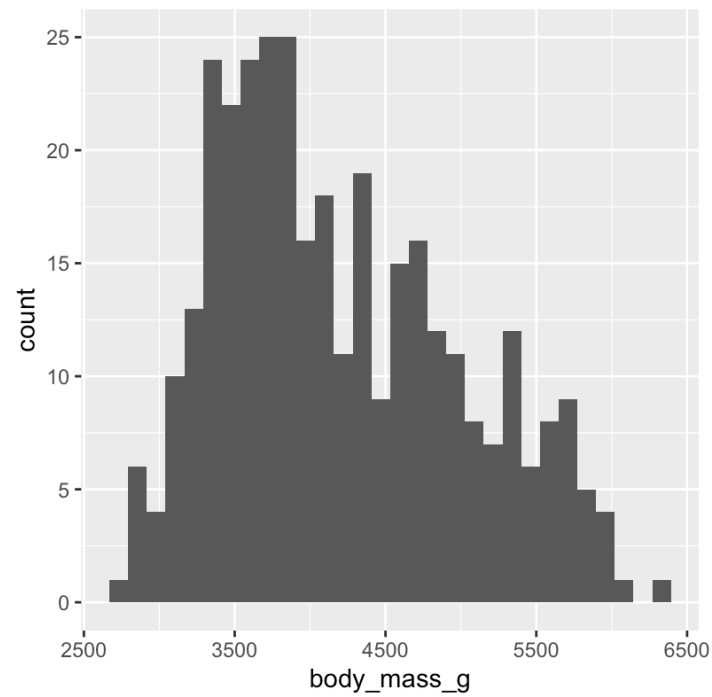


COMM101: Data Visualization with ggplot

Customization with scales and themes

Key concepts

Demo in R



Recap

New vocabulary and lingering questions

New vocabulary

Lingering questions

Exercises

comm101c.R contains the code to make the figure below. Edit the code to use scales and themes to improve the visual presentation.

