

# We R Under Way: A Data Science Portfolio

Kaydee Barker

03/21/2022



# Contents

## **1 Introduction 5**

Writing and code by Kaydee Barker, assignments by Dr. Lefsky (ESS 330) and Dr. Ross and Dr. Mueller (SOCR 580A7) of Colorado State University. Data cited within chapters.



# Chapter 1

## Introduction

“There are two kinds of data scientists: 1) Those who can extrapolate from incomplete data.”

I began my foray into R in the spring of 2020, first teaching myself some basic syntax and then using it for statistical analysis on my research projects as an undergraduate researcher at Colorado State University (CSU). With the help of my research mentors and many amazing people of the internet, I was able to fumble my way forward and learn a number of techniques to analyze and visualize data in R. I have since been building on my R and data science skills, including with the help of two key courses at CSU: “Quantitative Reasoning for Ecosystem Science” (ESS 330) and “Introduction to Environmental Data Science” (SOCR 580A7). Since I can’t yet publish data from my research projects, this portfolio is constructed of public data examples, primarily from my coursework in those two courses. Its purpose is a) to serve as a reference for myself and others learning to use R for environmental analyses, and b) to demonstrate my current R knowledge to advisors and colleagues.