5 Putting it all together: a case study

Every year for the past 40-plus years, Peter and Rosemary Grant have gone to the Galápagos island of Daphne Major and collected data on Darwin's finches. Using your skills in statistical inference, you will spend this chapter with their data, and witness first hand, through data, evolution in action. It's an exhilarating way to end the course!

Finch beaks and the need for statistics	50 XP
EDA of beak depths of Darwin's finches	100 XP
ECDFs of beak depths	100 XP
Parameter estimates of beak depths	100 XP
Hypothesis test: Are beaks deeper in 2012?	100 XP
Variation of beak shapes	50 XP
EDA of beak length and depth	100 XP
Linear regressions	100 XP
Displaying the linear regression results	100 XP
Beak length to depth ratio	100 XP
How different is the ratio?	50 XP
Calculation of heritability	50 XP
EDA of heritability	100 XP
Correlation of offspring and parental data	100 XP
Pearson correlation of offspring and parental data	100 XP
Measuring heritability	100 XP
Is beak depth heritable at all in G. scandens?	100 XP
Final thoughts	