

- **Homework Guidelines** Homework must be typed and stapled. Please label your paper with your name and lab time. See the syllabus for more guidelines.
- **Academic Integrity** You are encouraged to *discuss* the homework with other students, but what you turn in must be your own work in your own words. The syllabus contains more details and links to OSU's Student Conduct Code.

1. Use the meat processing data of case study 7.1.2 to do the following:
 - (a) Calculate a 90% (not 95%) confidence interval for the mean pH of steer carcasses at 6 hours after slaughter.
 - (b) Calculate a 90% (not 95%) prediction interval for the pH at 6 hours after slaughter.
 - (c) Using the method discussed in class and on page 194 of the text, calculate a calibration interval for the time at which approximately 90% of steer carcasses reach a pH of 7.0.
2. Problem 27 on page 204. Below is Figure 1 from the *Behavioral Ecology* article referenced in the problem.

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From: **Weight lifting and
health status in the black wheatear**

Behavioral Ecology. 1999;10(3):281-286. doi:10.1093/beheco/10.3.281

