Sample Quiz for Scientist Spotlight Featuring Dr. Danielle Brown

1. According to the abstract in the paper by Brown et al. (2013), what are some of the challenges that conservation biologists face in studying the behavior of wild animals? How does the use of accelerometers address these challenges?
2. Which of the following is NOT one of the major purposes of the paper by Brown et al. (2013), according to the Review section?
3. Review how accelerometers have been used for studying animal behavior.
4. Summarize current techniques for calibration of accelerometers.
5. Discuss reasons why traditional radiotelemetry is superior to use of accelerometers.
6. Illustrate the types of data produced by researchers using accelerometers.
7. What method did Dr. Brown and colleagues use to address the goals of the research paper?
8. They attached accelerometers to a variety of terrestrial and aquatic organisms themselves and tracked the animals.
9. They used search engines to find published papers on the use of accelerometers for animal studies.
10. They performed data analyses on a large, previously unpublished data set.
11. They explored theoretical applications of accelerometry by talking with wildlife professionals.
12. True or false? According to Figure 3 from Brown et al. (2013), the majority of bird species that have been studied with accelerometry have been wild and free-ranging.
13. Refer to Figure 5 from Brown et al. (2013). Briefly interpret this figure in your own words and address the following: A) In short, what does this figure illustrate? B) Explain the presence of plateaus in the lines that represent “heave,” “sway,” and “surge.”

Reference: Brown, D.D., Kays, R., Wikelski, M., Wilson, R., & Klimley, A.P. (2013). Observing the Unwatchable Through Acceleration Logging of Animal Behavior. *Animal Biotelemetry* *1*(1)**.** <https://doi.org/10.1186/2050-3385-1-20>