Chapter 8

Paper:

Claire M. Belcher, Luke Mander, Guillermo Rein, Freddy X. Jervis, Matthew Haworth, Stephen P. Hesselbo, Ian J. Glasspool, and Jennifer C. McElwain. "Increased fire activity at the Triassic/Jurassic boundary in Greenland due to climate-driven floral change." *Nature Geoscience* 3, no. 6 (2010): 426-429.

Questions:

- 1. Why does increased global temperature result in an increased prevalence of wildfires?
- 2. What is the main aim of the paper?
- 3. What is a Global Boundary Stratotype Section and Point (GSSP)? Where is the GSSP for the Triassic-Jurassic (T-J) boundary? Why was it important to correlate the Greenland section with the T-J GSSP?
- 4. What trend in fire activity is inferred from the proxy charcoal record?
- 5. What factors can potentially bias the fossil record of charcoal and how have these biases been minimized or eliminated in this study?
- 6. How can vegetation influence fire activity?
- 7. How did the authors investigate the potential influence of Triassic-Jurassic vegetation on palaeo fire activity?

