

**Fletcher et al. (2014)**

*Style:* Small groups of 3 - 4 persons, given five minutes (*or less if we are running out of time*) to discuss each question and respond to the class discussion.

1. What types of data did Fletcher et al. collect to help them address their research objectives?
  - a) And are you satisfied with this paper's methodology, or do you think they should have considered some other data categories?
2. Fletcher et al. considered a time range of ~ 7,500 years. Is this a strength of their research?
  - a) Should other studies broaden the time scales they investigate, and how might this be achieved?
3. A critical transition is identified in Figure 2 ~ 7,000 years ago and shows a marked change between a forest ecosystem (*left of dashed line*) and a nonforest ecosystem (*right of dashed line*). Fletcher et al. consider each of these ecosystems self-sustaining alternative stable states. We have previously considered that some of these “critical transitions” are subjective and may lack supporting data.
  - a) Are these two legitimate alternative stable states with a distinct critical transition?  
Vote!!!
4. How could UCF Arboretum management, teachers, etc., use the findings and discussion from this paper?