MONT 105N – Analyzing Environmental Data Study/Discussion Questions on "The Hockey Stick and the Climate Wars"

- 1. What is Michael Mann's scientific background? Where and how did he earn his PhD? At what universities/institutes has he spent his career? How many articles has he published, and in what sorts of journals?
- 2. Exactly what is the "hockey stick" graph? How was it originally generated? When and where did it first appear in the published scientific record? Have other studies confirmed or called into question the original conclusions?
- 3. When and why did the "hockey stick" become such a contentious issue in the climate change debate? What is the IPCC and what do they do? What was the role of the IPCC here?
- 4. What does Mann say about role of skepticism and healthy debate in good science? How can one tell the difference between healthy debate and an attack that is directed at the scientist personally or motivated by political and/or ideological differences? How are results communicated within the scientific community?
- 5. What mechanisms does the scientific community use for "quality control?" Is there a difference between "honest mistakes" and intentional misrepresentation in scientific work? Why might scientists want to introduce faulty or unjustified results into the published record? If an unscrupulous scientist wanted to introduce erroneous or unjustified results into the scientific record, would that be possible? Do you have any opinion about how successful these mechanisms are at rooting out faulty or improper science, over time? Has the rise of the internet and other communications media compromised these mechanisms? (or perhaps made them more difficult to apply?)
- 6. Mann himself has been the target of a number of extremely virulent personal attacks. What does he say about this? Why do you suppose that is true? Who is to blame for these and why? Mann, of course, has his own explanation for the attacks. What is that? Do you think he is correct here or not?
- 7. Is there any real scientific controversy in 2013 about whether anthropogenic climate change is occurring? Is there a larger purpose to attacks like those that Mann describes? Who "wins" if climate science is discredited? Who "loses" if its predictions are taken seriously and they start to influence public policy?
- 8. What was the "climategate scandal?" Who was involved? What charges were leveled against Mann and other climate scientists? On further review, were the attacks justified?
- 9. Why do you think that Mann has persevered in trying to work on these scientific problems? (After all, it would have been very easy just to give up and do something else.) Why has he written this book? Do you see him as just bullheaded? heroic? neither?
- 10. Is there an ethical issue here? What are the ethical responsibilities of scientists? Is it: "just do good (i.e. correct) science." Or should it be "do good science in the public interest?"