Date: 11/27/04  
Reviewer: Kirsten Butcher  
Name of resource: Bad Greenhouse  
Sponsoring Organization: Prof. Alistair Fraser, Professor Emeritus of Meteorology, Penn State  
URL: http://fraser.cc/BadScience/Bad/BadGreenhouse.html  
Site Homepage: http://fraser.cc and choose “Teaching” and “Bad Science”

RECOMMENDATION  YES  YES WITH RESERVATIONS  NO

STARS  1  2  3  4  5 (LAME TO STELLAR)

NARRATIVE (USE OTHER SIDE IF NEEDED)
What I love about this site is that the text is no-nonsense, even sarcastic, in presenting some contradictions to common misconceptions about the greenhouse effect. This helps grab the reader’s attention for what is, to many, a dry topic. What I don’t like is that the author has a tendency to assume a very high level of knowledge in his reader, so that many explanations seem incomplete to less advanced readers. For example, in response to the question: “Does the atmosphere (or any greenhouse gas) act as a blanket?” the response is:

   At best, the reference to a blanket is a bad metaphor. Blankets act primarily to suppress convection; the atmosphere acts to enable convection. To claim that the atmosphere acts a blanket, is to admit that you don’t know how either one of them operates. Well, I don’t know how it operates so it would be nice to have a clear explanation. But, this is clearly aimed at advanced learners and/or experts and I think it is a clever and interesting resource. It could be a good exercise for advanced students at the end of a lesson, to use in conjunction with other materials.

INTENDED USE
  X  REFERENCE
  ___ COMPUTER ACTIVITY
  ___ NON-COMPUTER ACTIVITY
  ___ EDUCATOR, LEARNER OR BOTH (CIRCLE)
  ___ BEGINNER OR ADVANCED (CIRCLE)

BUGS & TECHNICAL DIFFICULTIES (PROBLEMATIC TO ROBUST)
1  2  3  4

COMMENTS
Everything worked perfectly for me.

FACTUAL ERRORS/OMISSIONS (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)
1  2  3  4

COMMENTS
This site is more technical than the typical learning site --

PEDAGOGICAL INFORMATION
  X  REFERENCE ONLY
  ___ TEACHER GUIDE
  ___ MATERIALS LIST
  ___ ASSESSMENT STRATEGIES
  ___ TIMEFRAME PROVIDED
  ___ STANDARDS ALIGNMENT

PROMOTES STUDENT LEARNING (WEAK TO STRONG)
1  2  3  4

COMMENTS
It is not pedagogical in the sense of a tutorial or activity. But motivated learners will be challenged to examine their understanding in light of the claims on this webpage.

APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN (WEAK TO STRONG)
1  2  3  4

COMMENTS
There is no real use of multimedia here – the web page is mostly text and the few visuals that exist are decorative rather than explanatory (they do not add to the explanation of content). However, the text is well-organized and broken up into manageable bits that have a relatively nice visual appeal on the web.

VISUAL APPEAL (WEAK TO STRONG)
Unlike some text-heavy pages that make little attempt to organize content, the text here is well organized and bulleted into manageable bits that appeal to learners. I think that the simplicity and organization of this page does add to its appeal.

TEACHING TIPS: ANNOTATION DESCRIBING HOW SITE COULD BE USED OR ADAPTED FOR CLASSROOM
This page cannot stand on its own for learners. Advanced learners may use it in conjunction with more detailed resources. It might also make a good challenge to have learners respond to these claims as an exercise. E.g., does the author make good points? Why or why not?

RECOMMENDATION: ANNOTATION DESCRIBING HOW THE DEVELOPER COULD IMPROVE THE SITE.
Add clear explanations that are accessible to more intermediate learners – without this additional information, the site has less impact that it could otherwise achieve.