

5) Why is it that one CFC molecule can destroy so many ozone molecules?

6) What are the important factors that lead to the development of an ozone hole over Antarctica in the spring?

7) The Montreal Protocol has been effective in reducing CFC emissions – why is the ozone hole over Antarctica still so big?

8) What are the main sources of ozone in the troposphere?

9) In a recent address (Nov. 2006) at DePauw University, famous biologist and Pulitzer Prize and National Medal of Science winner E. O. Wilson made reference to the “sixth extinction”. What was he talking about?

10) What are some factors related to global climate change that place coral reef ecosystems at particular risk?

11) Explain how soil respiration in the high latitudes of the northern hemisphere could contribute to a positive climate feedback loop.

12) The Paleocene-Eocene Thermal Maximum extinction event has been attributed to a greenhouse gas warming scenario. What was the atmospheric concentration of CO₂ at that time? How close are we to that level today, and might we approach that level within the next century?