

Biomagnification Homework

Due Date: _____

Read:

Mercury Contamination of Aquatic Ecosystems,

<http://www.marietta.edu/~biol/102/mercury.pdf>

Critical Pollutants in the Great Lakes,

<http://www.marietta.edu/~biol/102online/criticalpollutants.pdf>

Contaminated Sediments and the Great Lakes

<http://www.marietta.edu/~biol/102online/contamsed.pdf>

Airborne Contaminants and the Great Lakes

<http://www.epa.gov/air/oaqps/gr8water/3rd rpt/execsum.html>

Answer these questions:

1. List at least 3 species adversely affected by biomagnification (note – list species, not groups of organisms).
2. Why is mercury in fish more of a problem for humans than PCBs?
3. If DDT is banned for use in the USA, why is it still of concern in the Great Lakes?
4. Why are the Great Lakes particularly susceptible to biomagnification?
5. List the ways that humans normally take up mercury and the adverse effects that occur via these routes.
6. Discuss your ideas about whether or not the cost of remediating contaminated sediments, such as in the Great Lakes, is justified.
7. What factors should be considered before cleaning up a contaminated area? (In another words, what questions need to be asked?)
8. Why is the issue of atmospheric transport of contaminants so important?

Note – all answers should be in your own words, not simply copied from the sources.