



Biomagnification How Toxins Move through the Food Web



Ecology and Evolution: Toxins in the Hudson

Typical Food Web for a Hudson River Freshwater Marsh





Biomagnification

- concentration of toxin accumulates as it passes through the food chain.
- Usually occurs through a series of predator-prey relationships





Biomagnification in an Aquatic Food Chain

http://www.youtube.com/watch?v=MXSv0ifvDjc&feature=player_embedded.

In this video, notice the source of the toxin and how it moves up the food chain.



Biomagnification in a Terrestrial Food Chain

http://www.youtube.com/watch?feature=endscreen&NR=1&v=E5P-UoKLxIA

What pathways might cadmium take from producers to predators?





DDT – A Famous Case of Biomagnification



The U.S. banned the use of DDT in this country in 1972, though it is still used in other countries.

Biomagnification of PCBs



Great Lakes food chain showing biomagnification of PCBs. Source: <u>www.epa.gov</u>