

Class
set

INTERACTION

NEW TERMS:

Abiotic--the parts of the environment that are non-living.

Biotic--the parts of the environment that are living or were once alive.

Food chain--shows how certain living things depend on one another for food.

The insecticide DDT has been banned in most countries. It worked well to kill mosquitoes and other insects, but it also entered the food chain, where it caused considerable harm.

Certain facts about DDT are given below. After reading them, answer the questions.

FACTS

1. Plankton absorbs DDT.
2. DDT was developed near the end of World War II as a long-lasting insecticide. It was used against mosquitoes and agricultural pests.
3. Many birds eat fish and insects.
4. Traces of DDT have been found in ocean water, even the Antarctic.
5. Through photosynthesis, algae are the main producers of food and oxygen in water environment.
6. Some fish eat plankton.
7. DDT affects the lime-producing glands in birds. The result is the formation of thin-shelled eggs.
8. DDT clings to algae.
9. Some floating algae are called "plankton".
10. Thin-shelled eggs of the eagle have been broken in their nests.
11. A concentration of 26.4 parts per million (ppm) of DDT has been found in the cormorant (a type of water bird), while 0.25 ppm has been discovered in small fish.

PART 1

1. These are some parts of the environment. Draw a food web to show the interactions that occur between them:

DDT, fish, air, plankton, water, insects, eagle, cormorant

PART 1 QUESTIONS:

1. What was DDT?
2. Why was DDT banned?
3. What parts of the food web did DDT effect?
4. What would happen to this environment is the fish became extinct?
5. What would happen to this environment if an alligator were introduced?
6. Why is it important to have a balanced environment?

PART II:

Design a food web using these organisms:

Wheat, rat, fox, human, cow, corn, rabbit, hawk, grass

PART III:

Design a food web using these organisms:

Chicken, cow, sheep, pig, grass, shrub, lettuce, pear, corn, human