



Unit 5 Section 2 Lesson 1: DDT - Doing Deadly Things

Handout 1

Raining Cats

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Malaria once infected nine out of ten people on the island of Borneo, now shared by the countries of Brunei, Malaysia, and Indonesia. In 1955, the World Health Organization (WHO) began spraying dieldrin (a pesticide similar to DDT) to kill malaria-carrying mosquitoes. The program was so successful that the dreaded disease was almost eliminated from the island. But other unexpected things happened. The dieldrin killed other insects, including flies, and cockroaches inhabiting the houses. The islanders applauded. But then small lizards that also lived in the houses died after gorging themselves on dead insects. Then cats began dying after feeding on the dead lizards. Without cats, rats flourished and began overrunning the villages. Now people were threatened by sylvatic plague carried by the fleas on the rats. The situation was brought under control when WHO parachuted healthy cats onto the parts of the island. On top of everything else, roofs began to fall in. The dieldrin had killed wasps and other insects that fed on a type of caterpillar that either avoided or was not affected by the insecticide. With most of its predators eliminated, the caterpillar population exploded. The larvae munched their way through one of their favorite foods, the leaves used in thatching roofs. In the end, the Borneo episode was a success story; both malaria and the unexpected effects of the spraying program were brought under control. But it shows the unpredictable results of interfering in an ecosystem.

