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The contribution other disciplines to Environmental Studies (the left side of the pie) and Environmental Science (the right side of the pie).



Rachel Carson wrote "Silent Spring" to warn people about the environmental impacts of DDT use.

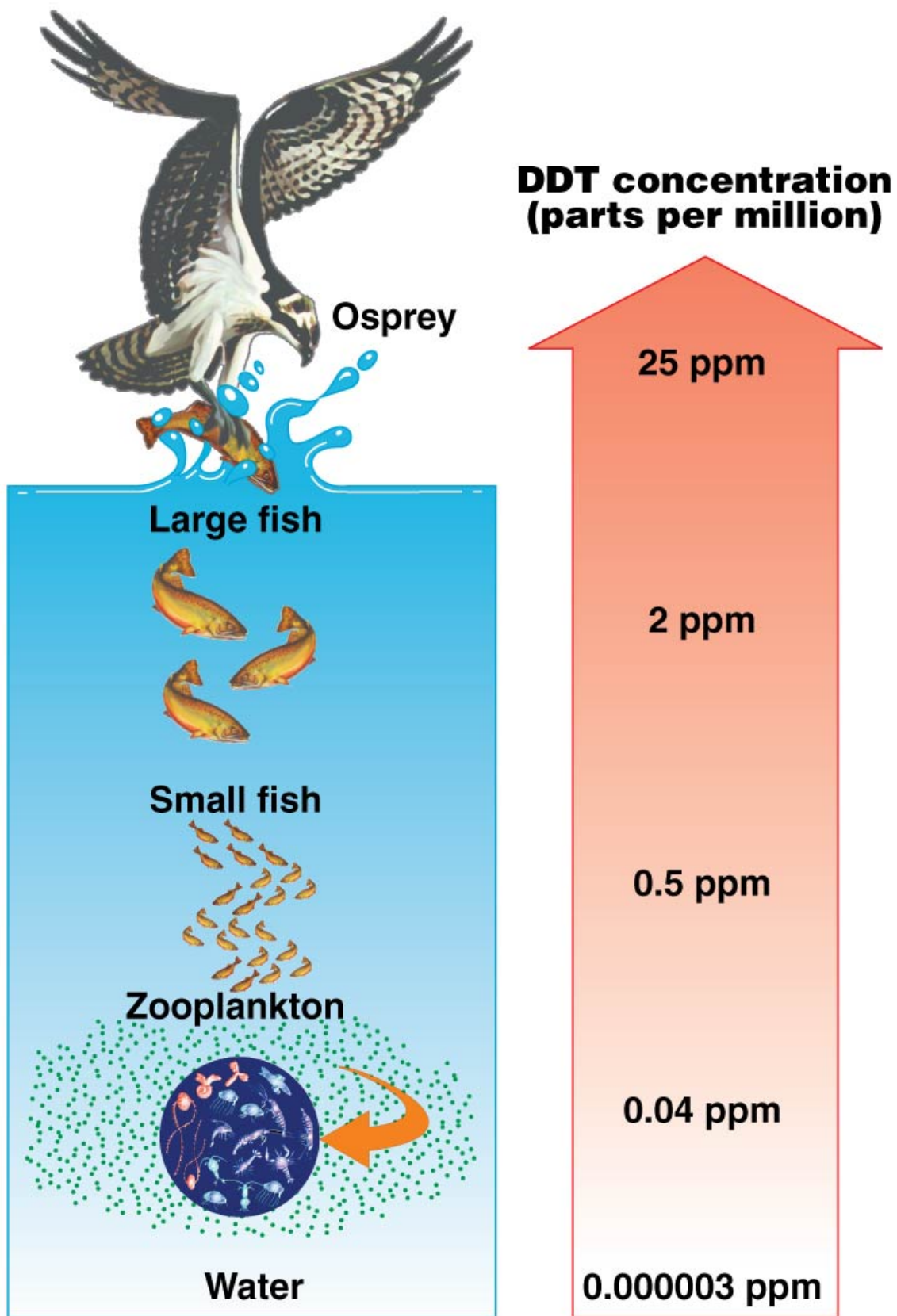


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Spraying DDT fog on bathers at Jones Beach, Long Island in the 1940s and 50s.

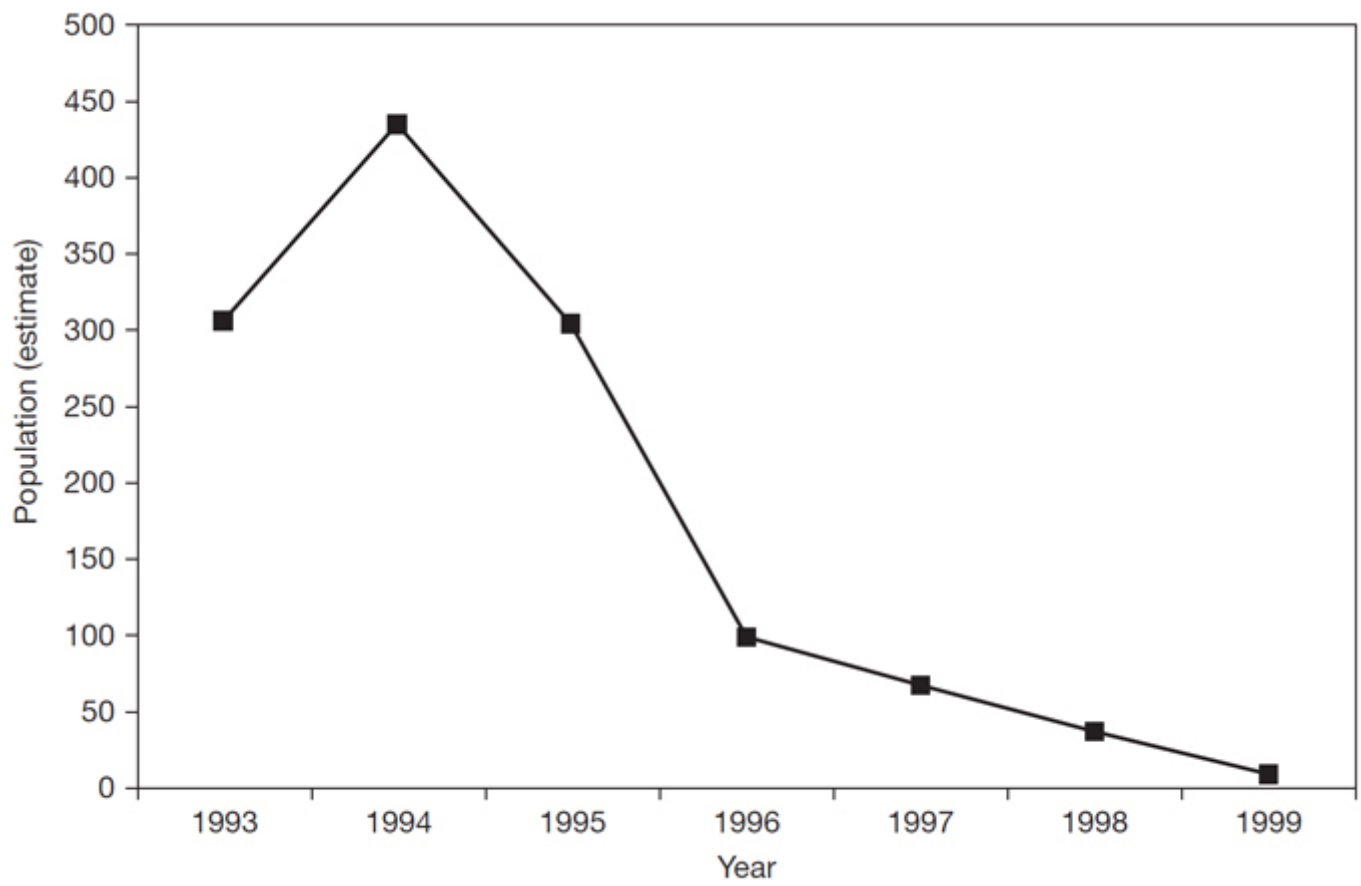


The endangered Channel Islands fox.



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Bioaccumulation of DDT in the marine food chain.



Population of Channel Islands foxes 1993-1999

Science diagnoses a threat
to the environment.



A concerned public galvanizes
support for change.



Scientists and businesses
look for new solutions.



Government adopts and
implements laws and regulations.

"Classical" environmentalism model

TABLE 5.1 Major U.S. Environmental Protection Laws, 1963–1980



Clean Air Act
1963;
amended 1970 and 1990

Sets standards for air quality, restricts emissions from new sources, enables citizens to sue violators, funds research on pollution control, and established an emissions trading program for sulfur dioxide. As a result, the air we breathe today is far cleaner (pp. 284–287).



Resource Conservation and Recovery Act
1976

Sets standards and permitting procedures for the disposal of solid waste and hazardous waste (p. 392). Requires that the generation, transport, and disposal of hazardous waste be tracked “from cradle to grave.”



Endangered Species Act
1973

Seeks to protect species threatened with extinction. Forbids destruction of individuals of listed species or their critical habitat on public and private land, provides funding for recovery efforts, and allows negotiation with private landholders (pp. 177–179).



Clean Water Act
1977

Regulates the discharge of wastes, especially from industry, into rivers and streams (p. 272). Aims to protect wildlife and human health, and has helped to clean up U.S. waterways.



Safe Drinking Water Act
1974

Authorizes the EPA to set quality standards for tap water provided by public water systems, and to work with states to protect drinking water sources from contamination.



Soil and Water Conservation Act
1977

Directs the U.S. Department of Agriculture to survey and assess soil and water conditions across the nation and prepare conservation plans. Responded to worsening soil erosion and water pollution on farms and rangeland as production intensified.



Toxic Substances Control Act
1976

Directs the EPA to monitor thousands of industrial chemicals and gives it power to ban those found to pose too much health risk (p. 221). However, the number of chemicals continues to increase far too quickly for adequate testing.



CERCLA (“Superfund”)
1980

Funds the Superfund program to clean up hazardous waste at the nation’s most polluted sites (p. 404). Costs were initially charged to polluters but most are now borne by taxpayers. The EPA continues to progress through many sites that remain. Full name is the Comprehensive Environmental Response Compensation and Liability Act.