

ENVIRONMENT

Dead in the Water It forms each spring and hits its lethal peak in summer—a blighted, oxygen-starved patch of the Gulf of Mexico. “Dead zones” occur around the world, from the Chesapeake Bay to the Baltic Sea. The biggest culprit? Agricultural runoff. In this case, fertilizer from upstream fields runs down the Mississippi River to the Gulf, where it spurs algae blooms. When the algae die (or are eaten and egested by zooplankton), they decompose on the bottom, depleting the oxygen, suffocating sea life—and hurting livelihoods. Clint Guidry, a Louisiana shrimper, says, “People can’t imagine how much marine life this is killing.” Last year’s dead zone was the third largest since monitoring began in the 1980s, but 2008’s could top it: The push for ethanol fuel means farmers are planting more corn, a crop often heavily fertilized. —Chris Carroll



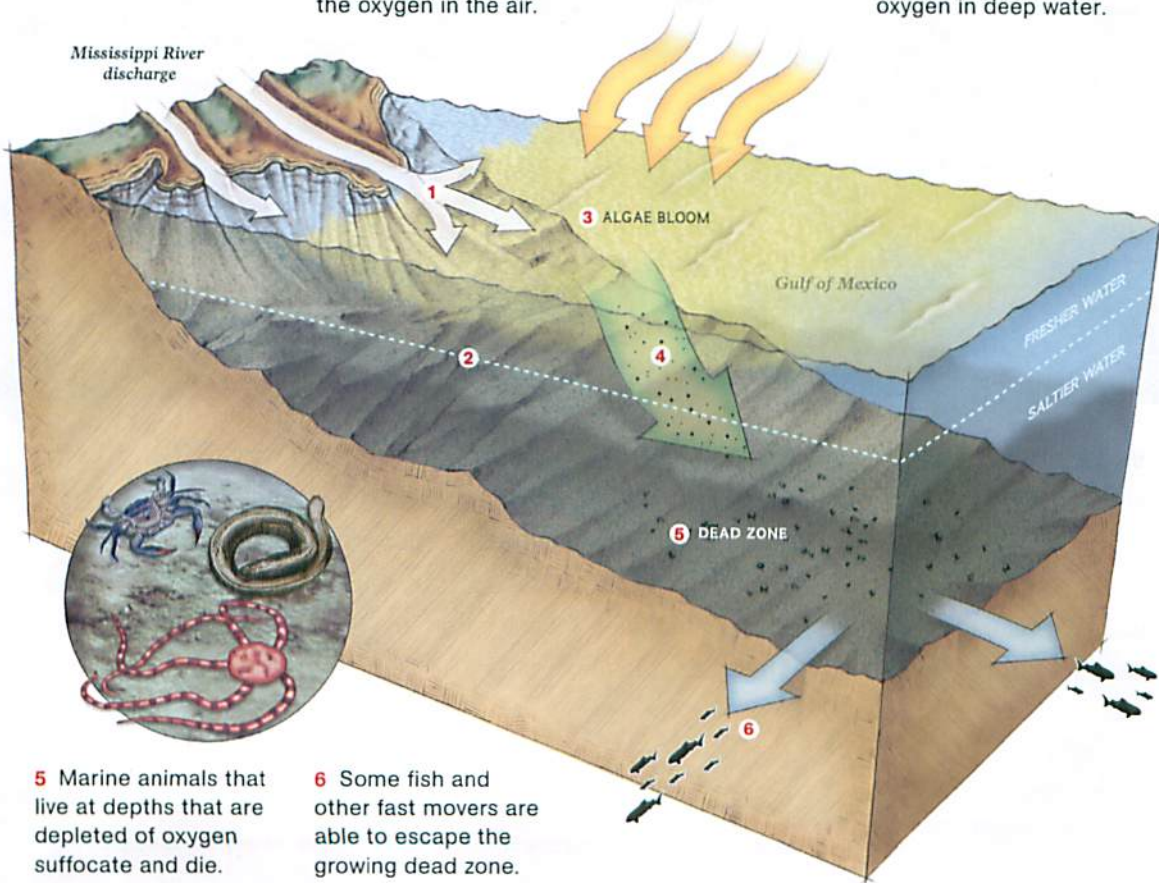
HOW THE DEAD ZONE KILLS

1 Fertilizer and other compounds empty from the Mississippi River into Gulf waters.

2 In spring, freshwater runoff creates a barrier layer, cutting off the salt water below from the oxygen in the air.

3 Problem: Various fertilizers and the warming waters cause an algae bloom.

4 Dead algae sink to the bottom and are decomposed by bacteria, depleting the oxygen in deep water.



5 Marine animals that live at depths that are depleted of oxygen suffocate and die.

6 Some fish and other fast movers are able to escape the growing dead zone.