

THREATS TO SEA OTTERS

Throughout history, humans have posed the greatest threat to sea otters, both directly and indirectly. From the mid-1970s to the mid-1980s, about 1,000 sea otters were caught and killed in gill and trammel nets used by fisheries. Fortunately, laws that regulated gill nets in the 1980s decreased sea otter deaths that resulted from **entanglement** in nets. However, new evidence suggests that sea otters may reside further offshore and may become entangled in nets once again and that the gill net fishery might be contributing to the recent increase in sea otter deaths.

Shooting of sea otters is also a problem. Since southern sea otters are protected as a threatened species under the Endangered Species Act, any actions taken to intentionally harm them is considered a federal crime. Between 1968 and 1989, 4.6 percent of recorded sea otter deaths were attributed to known or probable sea otter shootings. Although this number has decreased (only 1.6 percent of sea otter mortalities were attributed to shootings between 1990 and 2000), this crime is still a serious threat to the species. Defenders of Wildlife, along with other conservation groups, has raised reward money to ensure that the **perpetrators** are **prosecuted**.

A certain percentage of sea otter mortality also is attributed to collisions with boats and propellers. As human recreational and fishing activities increase in areas where sea otters reside, this form of mortality is likely to increase.

Oil spills, such as the *Exxon Valdez* spill of March 24, 1989, pose a continued threat to sea otters. Researchers are not sure how many sea otters died as a result of the *Exxon Valdez* spill. Approximately 1,000 oiled sea otter carcasses were found, but since the bodies of oiled sea otters usually sink to the bottom of the ocean, researchers believe these otters were only a small fraction of those that died.

Even small spills have an extremely **detrimental** impact on sea otters. Oil harms sea otters by coating their fur and impairing their ability to remain warm, causing **hypothermia** and ultimately resulting in death. Otters also ingested this oil during the crucial grooming activities. Once oil is ingested it travels into their internal organs, causing **irreparable** damage.

Disease is a source of sea otter mortality that can be attributed to the indirect effects of the environmental **contaminants** we use. Some contaminants in the food web directly impact sea otters. Some harm the immune systems of the sea otters, which increases the risk of disease. Researchers are investigating a new disease now being seen in southern sea otters. They have found a parasite that invades the brain, causing convulsions and ultimately death. This parasite is commonly found in cat litter, leading researchers to believe that cat litter is finding its way into the ocean.

Sea otters also have natural predators. The great white shark is the main predator of the southern sea otter. Orcas may be a major predator of sea otters in Alaska. Other predators include Steller's sea lions, bald eagles, coyotes and brown bears.

VOCABULARY

entanglement

the act of wrapping or twisting together

perpetrators

to bring about or carry out (as a crime or deception)

prosecuted

to bring legal action against for redress or punishment of a crime or violation of law

detrimental

obviously harmful

hypothermia

subnormal temperature of the body

irreparable

not reparable

contaminants

something that makes impure or unclean by contact or mixture

Check Your Reading Skills

Threats To Sea Otters

- 1) What are the natural predators of the sea otter?
- 2) Why is it illegal to intentionally kill or harm a sea otter?
- 3) Why is a small oil spill harmful to sea otters?
- 4) Why are sea otter diseases attributed to human activities?
- 5) Brainstorm some ideas how humans can help save sea otters through individual choices.

Reading Comprehension Check

Answers

- 1) The great white shark is the main predator of the southern sea otter. Orcas may be a predator of sea otters in Alaska. Other predators include Steller's sea lions, bald eagles, coyotes and brown bears.
- 2) Sea otters are a protected species under the Endangered Species Act. It is illegal to hunt, harass or harm them.
- 3) Oil harms sea otters by impairing their ability to remain warm, causing hypothermia and even death. Oil that is ingested also damages the sea otter's internal organs.
- 4) Humans indirectly cause sea otter disease through the use of environmental contaminants. Some contaminants make their way into the food web and can directly impact sea otters by harming their immune systems.
- 5) Answers will vary.