

UNIT 7 Structure and Function in Living Things

California Connections

Reproduction in the Aggregating Anemone

The aggregating anemone is found in tidepools from Alaska to Baja California. It is a green, flowerlike animal ringed by tentacles and is related to jellyfish and corals. The anemone reproduces asexually, producing clones by splitting itself in half. The clones live together in masses, or aggregations. They also reproduce sexually by releasing eggs and sperm, and the larvae that are produced migrate to new locations.

Water Conservation in the Kangaroo Rat

Six species of kangaroo rats live in California. Kangaroo rats received their name from the fact that they hop bipedally like kangaroos. Kangaroo rats have special adaptations to help them conserve water. Their kidneys reduce and concentrate their urine. In addition, the passages in their nostrils condense, collect, and recycle moisture.

Skin Lesions on Bottlenose Dolphins

Scientists who have been studying bottlenose dolphins along the Los Angeles coastline have been witnessing an alarming trend. The majority of dolphins they have sighted have light or dark skin lesions covering their bodies. This is particularly true of dolphins living in the waters of Santa Monica Bay, where billions of gallons of pollutants, such as heavy metals, end up after heavy rains. The pollutants are thought to be weakening dolphin immune systems, which leaves them susceptible to lesion-causing viruses.



Environmental Principles & Concepts

Principle I p. 499

Principle II pp. 459, 505

Principle III p. 493

For additional support, see the *California Education and the Environment Initiative (EEI) Curriculum: Biodiversity: The Keystone to Life on Earth*.

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Aggregating anemone



Desert kangaroo rat



Bottlenose dolphins with skin lesions