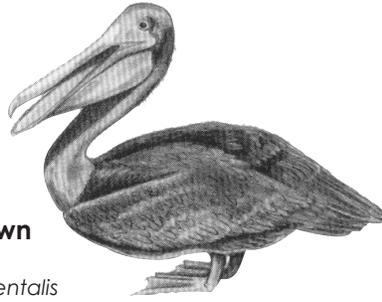


Going or Gone? Picture Cards

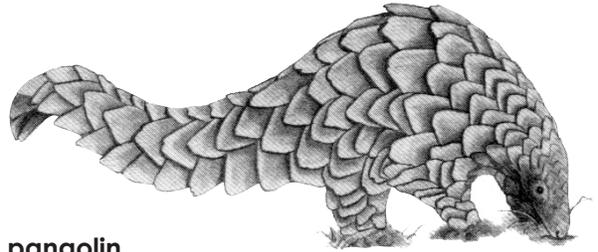


California brown pelican

Pelecanus occidentalis

HABITAT: coastal waters of California
DIET: fishes
BREEDING STRATEGY: nests along the edge of cliffs
HUMAN INTERACTION: DDT, a pesticide used on land, entered the ocean food web and caused reproductive failure.

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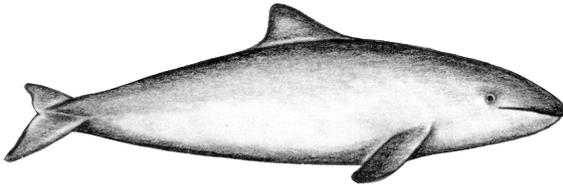


pangolin

Manis sp.

HABITAT: grasslands, forests of Africa and southern Asia
DIET: ants and termites
BREEDING STRATEGY: single young each year, live alone until breeding season
HUMAN INTERACTION: hunted for meat and scales

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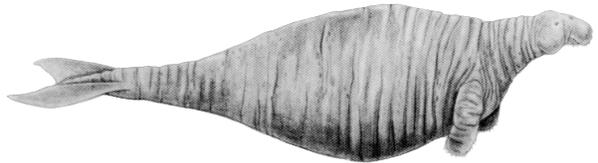


vaquita

Phocoena sinus

HABITAT: offshore waters of the upper Gulf of California
DIET: fishes
BREEDING STRATEGY: unknown
HUMAN INTERACTION: trapped in fishing nets that drown these air-breathing mammals

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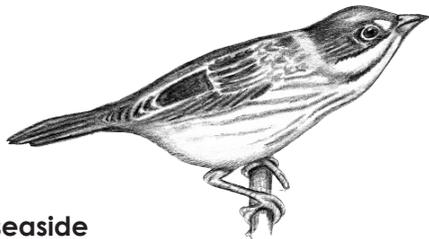


Steller's sea cow

Hydrodamalis gigas

HABITAT: shallow coastal water around Bering and Copper Islands in the Aleutian Island archipelago
DIET: kelp
BREEDING STRATEGY: single calf, adults may mate for life
HUMAN INTERACTION: hunted for food

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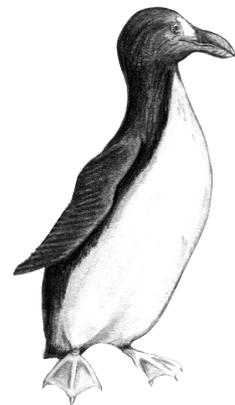


dusky seaside sparrow

Ammodramus maritimus nigrescens

HABITAT: salt marshes along the Indian River in Florida
DIET: insects and spiders
BREEDING STRATEGY: woven nest in salt marsh
HUMAN INTERACTION: drained, developed marshes

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great auk

Pinguinus impennis

HABITAT: rocky islands in the North Atlantic
DIET: small fishes
BREEDING STRATEGY: huge colonies on small, rocky islands
HUMAN INTERACTION: hunted for food and feathers

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Going or Gone?

OBJECTIVE

The student will distinguish, from a set of animal pictures, which animals are extinct and which still exist.

MATERIALS

- ❑ seven copies of *Going or Gone? Picture Cards* on insert

BACKGROUND

Use the following information to supplement student research:

California brown pelican (extant): California brown pelicans faced extinction during the 1950s and '60s when the pesticide DDT caused the eggs to have thin shells. When DDT was banned, the bird made a slow comeback and now has a stable population.

pangolin (extant): These mammals are not extinct, but some species are endangered. In Asia, natives grind the scales of the Cape pangolin into a powder that they believe has medicinal properties. Africans kill pangolins for both scales and meat.

vaquita (extant): As one of the world's most endangered whales, vaquitas number only a few hundred. Shrimp trawlers "accidentally" catch vaquitas in nets set to catch sharks and fish. In total, only 65 live vaquitas have been sighted, while 30 drown in nets each year.

Steller's sea cow (extinct): With a long reproduction time and small populations, this relative of the manatee became extinct in a short 27 years after it was discovered. Fur traders sailing to the Aleutian Islands easily caught and killed sea cows for food.

dusky seaside sparrow (extinct): Once living in the marshlands of Florida's Indian River, this sparrow died in the wild when lands were drained. In 1980, the last five birds were collected for captive breeding, but died as governmental red tape slowed the plan down.

great auk (extinct): During the seventeenth century, seafarers raided auk nests for eggs and killed birds for feathers and meat. By the middle of the 1800s, they were extinct.



ACTION

1. As a class help students define the terms extant and extinct.
 - ◆ **extant** – a species currently represented by living creatures.
 - ◆ **extinct** – no longer existing.
 Ask them to name examples of each.
2. Divide students into groups of five and give each group a picture card set. Direct groups to read cards and decide if they think these animals are extinct or extant. Have one person in each group write the group's decision at the bottom of each picture card.
3. Give students library time to research the actual status of these animals.
4. Lead a group discussion on whether the animals are extinct or extant. Can you tell just by looking? Ask students to share some of their research findings and use the above information to supplement their findings.
5. Ask students how they think an ecosystem changes when an animal becomes extinct. What happens to the balance between the animal's predators and prey?