

Endangered Condors Have Landed

For the first time in a century, condors are now visible in Oregon! Stretching 10 feet from wingtip to wingtip, California condors are the largest land birds in North America and once ranged from British Columbia to Baja California and inland to the Rocky Mountains. They were known by some indigenous peoples as “thunderbirds,” and Lewis and Clark described them in an 1805 journal entry. But by the 1980s, the California condor had all but disappeared.

You and your students now have the opportunity to see these magnificent birds up-close in their new exhibit at the Oregon Zoo. The four-story aviary includes a lush, native landscape and cascading water feature with a deep pool of condor bathing. With a 5,800-square-foot roof, the exhibit is designed to allow flight, and it features tall perches placed for optimal sunlight, which provides both warmth and a means for zapping bacteria on a bird that spends much of its time head-deep in dead animals.

Though native to Oregon, condors have not been documented in the state for more than a century. A confluence of pressures during the first half of the 20th century nearly drove the majestic birds to extinction. The California condor was one of the original animals included on the 1973 Endangered Species Act. By 1987, the entire population had been reduced to 27 birds, which were taken into captivity in an attempt to save the species.

The Oregon Zoo joined the California condor recovery program in 2003, with the creation of the Jonsson Center for Wildlife Conservation. The donor-funded breeding facility is located in rural Clackamas County. More than 40 chicks have hatched at the Jonsson Center since 2003, and more than 20 Oregon Zoo-reared birds have gone out to field pens, with most released to the wild. In addition, several eggs laid by Oregon Zoo condors have been placed in wild nests to hatch.

With the help of breeding programs like the Oregon Zoo’s, condor numbers now total around 400. More than half of the population lives in the wild.

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we find it hitched to everything else in the universe. *John Muir*



Accumulated lead poisoning – a problem that plagues many predators and scavengers – is the most severe obstacle to the California condor’s recovery as a species. As the birds feed on carrion and other animal carcasses, they can unintentionally ingest lead from bullet fragments. Lead consumption causes paralysis of the digestive tract and results in a slow death by starvation. Lead also causes severe neurological problems, so the birds not only starve but suffer from impaired motor functions.

Inspiring Action for Wildlife

Here are three actions you and your students can take to protect these amazing animals:

1. **Exploration:** Learn everything you can about condors and the natural world. The activity below, “Condors in the Classroom,” is one way for students to build an understanding about the important role condors play in the environment.
2. **Get the Lead Out:** Have students create posters for display in school hallways that alert others to the damaging effects of using lead ammunition.
3. **Reduce, Reuse, and Recycle:** Reduce the risk that condors accidentally ingest plastic or other trash by purchasing less and volunteering to help clean up litter from natural landscapes.

Condors in the Classroom

Introduction

Every organism needs energy to live. This energy comes from the food we eat. Energy passes from one animal to another as they eat plants or one another. For example, plants get energy from the sun, some animals eat plants, and some animals eat other animals. The flow of energy from one living thing to another is called a food web. A food web is a sequence of who eats whom in a biological community (an ecosystem) to obtain energy.

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Food webs are made up of producers, primary consumers, secondary consumers, scavengers and decomposers.

Producers

At the beginning of all food webs is the sun. Sunlight is energy. Plants use this energy to convert water and carbon dioxide into plant food. Plants are called producers because of the large amount of energy they make.

Primary Consumers

Animals that eat only plants are called herbivores. In a food web, they are called primary consumers because they are the first animals to eat the plants. The energy in the plant is transferred to the primary consumer when it is eaten. In the wild, a basic food chain in our region would be plants and black-tailed deer. The deer is the primary consumer and the plants are the producers.

Secondary Consumers

Many primary consumers make tasty meals for larger animals. A shrew that eats a grasshopper that eats a plant is a good example. The shrew is the secondary consumer because it eats the animal that eats the plant. Other secondary consumers can enter the picture when they, in turn, eat the first secondary consumer, in this case the shrew.

Scavengers and Decomposers

Not all plants and animals are eaten by consumers. Old age, disease, and fatal accidents claim the lives of others. The energy from the food eaten or made is what is left when a plant or animal dies. This energy gets returned to nature when the dead plant or animal begins to break down or rot.

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The first members of the clean-up crew are scavengers like the California condor. Scavengers use their excellent sense of smell to find their stinky meal. Decomposers like fly maggots, beetles, ants, and moths are next in line. They get the job of further breaking down the dead animal by eating it, laying eggs on it, or chewing through it. Last but not least are the bacteria and fungi who continue the decomposition process until nothing is left and all the energy is returned to the soil where plants can once again use it.

Procedure for activity

1. Explain to students that they will be creating a food web. Ask them what they know about food webs. Record answers on board.
2. Get a large ball of yarn and have everyone make a large circle.
3. One student holds the free end of the yarn. This student represents the sun. The “sun” tosses the ball of yarn to another student, but keeps hold of the free end. That student tells the group what part of the food web they will be (“I am a plant” or “I am a condor”). They should unravel some of the yarn, hold on to it and toss the yarn ball to another student who also announces what part of the food chain they will be and whether they are a producer, consumer, scavenger, or decomposer. Remember to hold on to part of the yarn before you toss the yarn ball. Continue tossing the yarn ball until every student is holding part of the yarn.
4. Next, one student tells the group what they are and begins to tug on the yarn. As other students feel the tug, they should tug back. What happens? What does this tell you about food webs?
5. Finally, have students explore what happens when an animal is removed from the food web. Tell students that condors have eaten dead animals filled with lead shot and are now dying. Have the “condor” drop the yarn from his or her hand. Discuss with students what happens to the rest of the animals when the “condor” is removed from the food web? Emphasize the importance of each animal to the health and sustainability of the ecosystem.

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