

U.S. Fish & Wildlife Service California condor Gymnogyps californianus

Oral legends and traditions handed down from generation to generation indicate that condors have always played an integral role in western American Indian culture. Condors are considered to be sacred and are revered in ceremony, song and dance.

In more recent times, the California condor has become the subject of an intense and sometimes controversial effort to save the species from extinction. Faced with rapidly declining numbers, scientists began collecting wild-laid eggs and capturing free-flying birds to breed them in captivity with the goal of restoring a healthy population.

California condors are the largest flying land birds in North America. They weigh about 20 pounds and have wingspans of 9½ feet. California condors have bare heads and necks, dull gray-black feathers and blunt claws. They have a triangle-shaped patch of white, visible only when airborne, on the underside of their wings.

California condors can soar on warm thermal updrafts for hours, reaching speeds of more than 55 miles per hour and altitudes of 15,000 feet.

California condors do not become sexually mature until they are six years old and may not start breeding until age seven or eight. They nest in shallow caves found on cliff faces that usually have nearby trees for roosting and a clear approach for easy takeoffs and landings. Typically, an adult pair raises one chick every other year. After leaving the nest, the juvenile may be dependent on its parents through the next breeding season.

The largest North American bird, California condors weigh up to 25 pounds and have wingspans of 9¹/₂ feet. California condors have bear heads and necks, dull gray-black feathers, blunt claws and a triangle-shaped patch of white on the underside of their wings which is visible only when they are flying. Like all vultures, condors are carrion-eaters. They prefer large dead animals such as deer, cattle, and sheep, but will also eat rodents and, more rarely, fish. If a meal has been particularly big, they may have to spend hours on the ground or a low branch before they can take off again. Condors are fastidious birds—after eating they clean their heads and necks by rubbing them on grass, rocks or tree branches. Condors also bathe frequently and spend hours preening and drying their feathers.

Condors probably never were numerous in North America. The species once ranged along the entire Pacific Coast from British Columbia to Baja California. Fossils have been found as far east as Florida and New York. More recently, however, they were confined to a horseshoe shaped area of California that included portions of coastal mountain ranges, the Transverse range and the southern Sierra Nevada Mountains.

For years, no one knew precisely how many California condors existed, although they have been considered a declining species

since

the 1890s. One estimate put their number at 100 in the early 1940s. Another indicated there were 50 to 60 in the early 1960s. By the late 1970s, the estimate had dropped to 25 to 30 birds.

Although scientists cannot pinpoint the exact reason for the reduction in the condor population, random shooting generally has been considered the single most serious cause of the condor's decline. Other factors include collection of condors and their eggs. poisoning from substances used by ranchers to eradicate livestock predators, and poisoning from ingesting lead bullet fragments embedded in the carcasses of animals the condors feed on. In addition, the roads, cities, housing tracts and weekend mountain retreats of modern civilization have replaced much of the open country condors need to find food. Their slow rate of reproduction and years spent reaching breeding maturity undoubtedly make the condor population as a whole more vulnerable to these threats.

Recognizing the California condor's perilous state, the U.S. Fish and Wildlife Service listed it as an endangered species in 1967 under a precursor to the Endangered Species Act of 1973. *Endangered* means a species is considered in danger of extinction throughout all or a significant portion of its range, while *threatened* means the a species is likely to become endangered within the foreseeable future. The Fish and Wildlife Service, the California Department of Fish and Game and the National Audubon Society, along with other government and private groups, began a joint effort in 1979 to study and preserve condors.

As part of this effort, biologists captured condors, weighed and measured them, and fitted some with tags and radio transmitters so they could be monitored and identified after being released. Biologists learned about the condors' feeding, mating, and chick-rearing habits, as well as their habitat needs. They also confirmed that California condor pairs that lost an egg would lay a second or even a third one.

To increase the condors' egg production, the biologists began removing eggs laid in the wild in 1983. The eggs were taken to the San Diego Wild Animal Park or the Los Angeles Zoo for hatching. The first California condor hatched in captivity in 1983. Nicknamed "Sisquoc," this condor and subsequent chicks hatched from wild-laid eggs were raised in an environment designed to simulate their natural habitat.

Meanwhile, researchers began capturing young condors in order to start breeding them as quickly as possible before the wild population declined further. Bringing immature, non-breeding birds into captivity would speed up the time it would take to create a viable, breeding population.

Until 1985, biologists planned to leave at least some condors in the wild. It was believed the free-flying condors would provide role models to captive-hatched

Zookeepers use hand puppets that look

birds that could hopefully be restored to the wild in the 1990s.

Then, disaster struck. Members of four of the five remaining breeding pairs disappeared over the winter of 1984-85, and the wild population was reduced from 15 to nine birds. With the number of wild condors continuing to plummet in 1986, the biologists decided to capture all remaining wild California condors and bring them into the captive breeding program. The last remaining wild California condor was captured in 1987. Two captive birds successfully mated and produced the first captive-bred condor chick the following year.

In 1988, the Fish and Wildlife Service began a three-year reintroduction experiment using Andean condors as stand-ins for their endangered California cousins.

Between December 1988 and January 1989, thirteen female Andean condors were released, equipped with radio transmitters for monitoring by biologists. Only females were released to prevent reproduction in the wild—accidentally introducing a new species into a new habitat. These birds helped scientists perfect release techniques and to identify environmental threats before California condors were reintroduced. One of the Andean condors died after a collision with a power line and the rest were later recaptured and returned to their native habitat in South America.

In January 1992, two California condors were reintroduced into the Los Padres National Forest's Sespe Condor Sanctuary in California, along with two Andean condors. Biological studies indicated that



California condors develop better in social groups. And because there were only two California condors ready for release, biologists made up the difference with the Andean relatives. Later that year the two Andean condors were recaptured, transported to South America and released in a protected area. To date, 68 California condors have been released into the wild.

In the early years of the reintroduction program some of the condors died after colliding with power lines and others were returned to captivity because biologists considered some of their behavior improper.

By nature, condors are exceptionally curious and show no fear of humans. And while birds born and raised in the wild could learn about the hazards of their environment from their parents, captive-released birds have no such role models.

Condors scheduled to be released to the wild now undergo a power pole aversion training program which uses mock power poles that deliver a small electric shock to the birds when they try to land on them. As a result of this program condor mortality from power line collisions has been greatly reduced.

Today there are 153 California condors alive. Thirty-seven birds are flying free in California and Arizona and 116 remain in captivity. Three facilities are breeding condors for release to the wild—the San Diego Wild Animal Park, Los Angeles Zoo and the Peregrine Fund World Center for Birds of Prey in Boise, Idaho.

While the outlook for the California condor is more promising than it was years ago, there is more work ahead. The U.S. Fish and Wildlife Service will continue releasing California condors into the wild in hopes of establishing two separate, self-sustaining wild populations of birds, one in California and the other in Arizona.

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like adult condors to feed captively-bred condor chicks.