

HOW CAN YOU HELP THE CALIFORNIA CONDOR?

1. Learn about the California condor and other wildlife. Look for books in your library about condors and other wildlife or write to the California Department of Fish & Game and ask for information about condors.
2. If you are a student, tell your parents and teachers that you want to learn more about condors. Ask your teacher if you can do a project on condors, or make it a class project.
3. Write letters of support for programs that help the California condor.
4. If you visit areas where condors are found, do not disturb them in their nesting, roosting, and feeding areas. Be sure to obey any signs or other instructions.
5. Never shoot at hawks, eagles, vultures, or condors. If you ever see anyone doing it or any other illegal activities, report them immediately to the game warden or sheriff.
6. Learn about the Endangered Species Act and other endangered and threatened species, about why they are approaching extinction and what is being done to save them.

CONDOR FACTS

Scientific name - *Gymnogyps californianus*.
Body length - 46 to 55 inches.
Wing span - 9.5 ft, largest in North America.
Weight - 20 to 23 pounds.
Voice - none, but may grunt or wheeze.
Food - large, dead animals in open areas.
Reproduction - nests once every other year.
Nest site - usually a cave in a cliff or a crevice among boulders on a steep slope.
Number of eggs per nest - 1.
Incubation period - about 56 days for egg to hatch.

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The California Condor



NEEDS OUR HELP!



University of California, Davis
Cooperative Extension

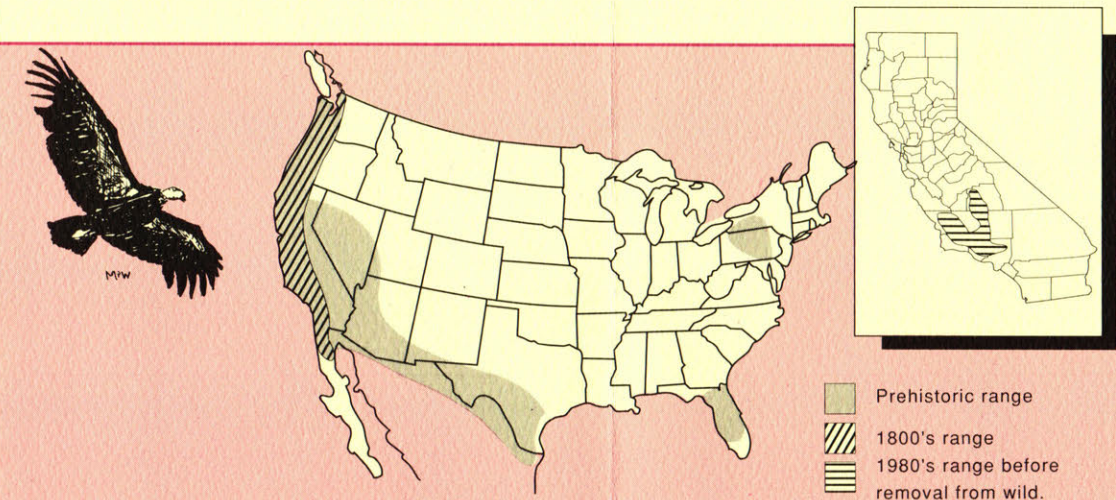


WHAT'S THE PROBLEM WITH CONDORS?

The number of California condors and the number of places where they are found have gone down since the 1800s (see map below). By 1983 only 20 birds were left in the wild, all in southern California. The condor was endangered and near extinction. Biologists captured the remaining birds and will keep them in captivity until there are enough condors for release under safe conditions.

REASONS FOR THE DECLINE IN CONDOR NUMBERS

1. *Shooting* - In the 1800s people were ignorant of the role of condors and many were shot as pests or out of curiosity. Today, it is illegal to kill condors, but there are still people who might shoot one. We know this because condors and other protected wildlife have been found shot.
2. *Environmental contaminants* - Campaigns in the 1800s to remove grizzly bears and other predators probably killed many condors. Condors are very susceptible to the strychnine poison that was placed in carcasses left for the predators. The pesticide DDT, now banned, caused thin eggshells in the 1960s and may have made some condor eggs break easily. Poisons still may occur in the food condors eat. Lead bullets in deer, ground squirrel, or coyote carcasses can cause lead poisoning. Three condors are known to have died of lead poisoning in the 1980s and it has likely been a source of mortality in the past.
3. *Environmental hazards* - Powerlines crisscrossing condor range are a real danger. Condors hit them and die, or they may be electrocuted when they perch on the cross-arms of the towers and poles.
4. *Loss of safe habitat* - Although people took some of the condor's living space when they built houses and shopping areas, the condor's nesting and roosting sites remain remote and inaccessible. Foraging habitat in the grasslands and foothills of the San Joaquin Valley, southern California, is about the same as in times past. However, man's activities have made the foraging areas unsafe for condors. Most of the recent condor deaths are thought to be from shooting, lead poisoning, or accidental collisions on the foraging areas.
5. *Reduction in food supply* - Long ago, condors ate the remains of large mammals that were common in prehistoric times. About 10,000 years ago with the extinction of many large mammals including giant sloths, mastodons, and camels, the condor also disappeared from most of North America until it remained only along the Pacific coast. The decline of condors in the 1900s is not thought to be related to any change in the food supply. Research showed foraging areas in California, used mostly for cattle grazing, had large food supplies in the form of cattle, deer and other animals.

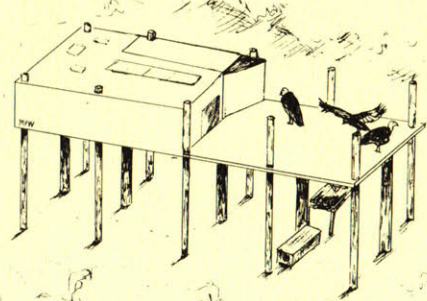
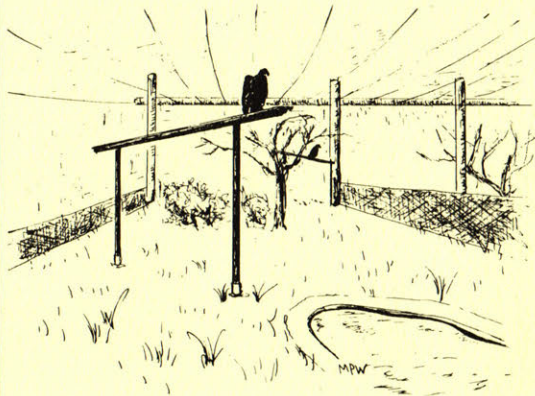


What's Being Done To Help Condors

1. CAPTIVE PROPAGATION

Biologists are breeding and raising condors in captivity; this is called captive propagation. By breeding the Andean condor (a bird from South America related to our condor) beginning in the 1960s, the U.S. Fish & Wildlife Service found ways that are now used to breed the California condor. Condors raised this way will be released into the wild.

The captured California condors and their offspring used for breeding live at the San Diego Wild Animal Park and the Los Angeles Zoo. In the early 1980s biologists took young condors from the wild and put them in their new zoo homes. They also took eggs from wild nests and from captive pairs and hatched them in incubators. These actions greatly increased reproduction over previous levels in the wild. Breeding the condor in captivity now appears to be one of the easier parts of the species' road to recovery.



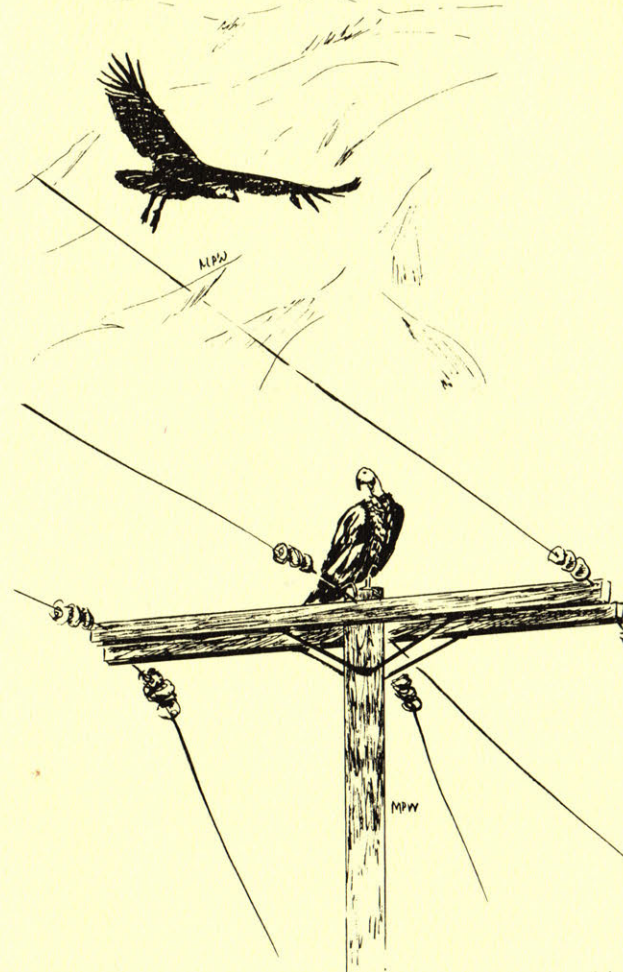
2. EXPERIMENTAL RELEASES

Biologists have tested whether condors raised in zoos would know how to find food and mate in the wild. It was first tried in 1980 when 11 Andean condors were successfully released in Peru. Since 1988 young, zoo-raised Andean condors have been successfully released at various sites in southern California. Free to fly, the young birds have explored their new homes around the release sites and have used roosting areas formerly used by the California condor. Lessons learned from the Andean condors will help zoo-raised California condors succeed when they are released.

3. REDUCE ENVIRONMENTAL HAZARDS

Biologists are working to find and then correct factors that have harmed the California condor. Through education and publicity it is hoped attitudes about shooting condors can be changed. Lead poisoning remains a problem. Restricting shooting in all condor range is not practical, but future research may discover replacement materi-

als for lead bullets. Until then, providing released condors with uncontaminated food will help prevent lead poisoning. Mortality from collisions with overhead wires or electrocution can be lessened by burying transmission lines underground, by making above-ground wires more visible, and by installing special perches on powerline poles.



4. HABITAT PROTECTION

Eventually, California condors will be released into the wild. The first releases should occur in the Sespe Condor Sanctuary because it has very little shooting or human disturbance and has existing nest sites. As a safeguard against a disaster such as disease killing most or all of the condors in the Sanctuary, biologists will need to release condors in other areas. These areas must have the nesting, roosting, and feeding sites that condors need, and be safe from the dangers of shooting, poisons, and other mortality factors. Sites often mentioned for future releases in California include the Carrizo Plain in Kern County and the Coast Range mountains in San Luis Obispo and Monterey counties. The Grand Canyon area of Arizona may be another release site. Protecting these areas to secure the comeback of the California condor will require the joint efforts of local, state, federal and private agencies.

This brochure was prepared by W. Paul Gorenzel, Staff Research Associate, E. Lee Fitzhugh, Extension Wildlife Specialist, Department of Wildlife and Fisheries Biology, Cooperative Extension, University of California, Davis, CA 95616, and H. Randolph Perry Jr., Chief, Endangered Species Research Branch, U.S. Fish & Wildlife Service, Patuxent Wildlife Research Center, Laurel, MD 20708. Artwork by Mary P. Wilkinson. Funding for this publication was provided by the U.S. Fish & Wildlife Service.

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**WILDLIFE AND FISHERIES BIOLOGY
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October 9, 1990

TO: San Luis Obispo County Cooperative Extension

FROM: W. Paul Gorenzel *Paul Gorenzel*
Staff Research Associate, Wildlife & Fisheries Biology

Lee Fitzhugh, Extension Wildlife Specialist at the University of California in Davis, has asked that I send to your office copies of a new brochure about the California condor. The brochure, entitled, "The California Condor Needs Our Help" is appropriate for high school students and others interested in the condor.

The following topics are discussed in the brochure: condor biology and behavior; historical review of condor range and populations; reasons for the decline in condor numbers; recovery programs including captive propagation, experimental release, reduction of environmental hazards, and habitat protection; and ways that students and others can help the California condor.

I have enclosed 100 copies for your use. If you need more copies, I would be happy to send more. We have about 10,000 copies left at this time. I would be most appreciative of any suggestions you might have concerning the distribution of the remaining stock.

Thanks for your help. If I can be of any further help or you have any questions about the brochure, please contact me at (916) 752-2263.

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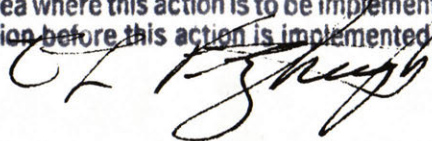
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The presence of an endangered or threatened species of plant or animal where this action (chemical, non-chemical, mechanical or otherwise) is to be taken, could preclude use of this action. Therefore, if the user is aware that an endangered or threatened species or its critical habitat exists in an area where this action is to be implemented, they must contact the U. S. Fish and Wildlife Service for further information before this action is implemented.



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