



California Condors of the Colorado Plateau

The program of releasing California condors (*Gymnogyps californianus*) in northern Arizona has been entered into by the FWS as a partnership among various federal agencies (NPS, BLM, USFS) and state agencies (AGFD) and The Peregrine Fund, a private/nonprofit organization.

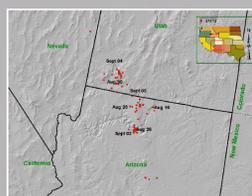
The first Arizona condor release occurred on 12 December 1996. After five years of the release program, there are 32 free-flying condors in northern Arizona.

Background



The non-essential experimental population status applies to condors only when they are within the geographic bounds in northern Arizona and southern Utah. When condors leave this area they receive full protection of the ESA, which may have regulatory implications.

When condors are within National Park Service park and monument boundaries in northern Arizona and southern Utah, they are considered a threatened species and receive applied protection of the ESA.



Condors have been known to fly widely, but generally remain within Grand Canyon National Park and the vicinity of the release site.



Condors have left the nonessential experimental area on several occasions, flying as far north as Flaming Gorge, Wyoming, 310 miles from the release site.

Resource Management

Like many scavengers, California condors are exceptionally curious. In a human-dominated world, such curiosity can be manifested as an overall fearlessness of humans. Historic accounts suggested that some wild condors were unwary and sometimes drawn to human activity (Snyder and Snyder 2000). Unacceptably curious birds place themselves in jeopardy, perching in dangerous locations with no escape route, initiating or allowing human contact and playing with trash and anthropogenic objects. Biologists developed and implemented several techniques of aversive conditioning which often resulted in a marked improvement in behavior.



The Orphan Mine, situated on the South Rim of Grand Canyon National Park, provided the ideal perch and roost site for condors. Unfortunately, the site is contaminated and under restoration. Perching deterrents (e.g., nixolite) were placed appropriately to discourage birds from being attracted to the site.



Supplemental water tanks during fire danger proved to be another high risk attraction for the birds. Condors were often found playing and drinking from the 4 ft deep tanks with no mechanism for escape once their feathers became soaked. Often, these tanks were placed near helibase sites, causing yet another risk as birds flew in and out of the water tank locations.



Lead pipe perches which protect visitors from the canyon's edge, attracted birds as a popular perch site. Birds were often approached by visitors, putting both visitor and bird in harm's way. An electrical conduit was installed in an attempt to conduct aversive conditioning. However, due to thick skin on the feet of condors, the electrical charge was less than effective.

Breeding



Nesting activity for the northern Arizona population first occurred in March 2001 in a shallow ledge in the upper reaches of Grand Canyon National Park. Birds were observed rolling the egg near the lip of the nest ledge, shattering the egg and soon abandoning the site.



In 2002, additional condors reached maturity and two pairs nested off of the South Rim in the park.



A volunteer nestwatch program was organized to collect data on incubation switches and parent foraging patterns from sunrise to sunset.



In mid-May, just 2 weeks from hatching, both pairs abandoned the nests. Following a 200 ft descent with a 400 ft vertical drop off, rangers retrieved eggshell fragments from the Battleship Nest. They were unable to enter the Dana Butte nest but photographed an in-tact egg.

Health Risks

Lead



Lead continues to directly affect California condors. In the past 2 years, at least 6 birds from the northern Arizona population have died from lead ingestion. Following chelation, birds are left in a weakened condition, now being researched to assess connections to failed eggs and chick fledging.

Shootings



Intentional shootings still pose a threat to condors today. Two birds adjacent to the Park were recently killed and one bird in 1999 was intentionally shot within the Park boundaries.

Environment



Three condor chicks that hatched successfully from the California population, were recently found dead just days prior to fledging. X-rays from one chick found the digestive system block with items such as bottle caps, battery and wire connection cables and porcelain fragments. It is unknown if the nest site was previously occupied by ravens or if the adults retrieved and transported the items into the site.