

DEFENSIVE BEHAVIOR OF AN IMMATURE CALIFORNIA CONDOR

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On 24 June 1980 I observed an immature-plumaged California Condor (*Gymnogyps californianus*) engaged in a mode of defensive behavior not previously recorded. The observations occurred in San Luis Obispo County, immediately north of the Santa Barbara County line, within 250 m south of State Highway 166. All observations were with an 8x 35 binocular or a 60x scope.

I observed the bird from 1845 until 1927 when the bird soared out of view over a low ridge. It was first noted at about 250 m distance in alternating soaring and flapping flight. It was attempting, ineffectually, to clear a low ridge while being propelled toward the ridgecrest by a brisk west wind. Unable to clear, the condor landed and after a brief pause walked eastward uphill some 15 m to cross the gently contoured ridgecrest. It then ran about 6 m downwind down the reverse slope and again became airborne. Despite several bouts of flapping, it lost altitude relative to the descent of the slope and it came to earth again after approximately a 30 m flight. The condor repeated this several times while I paralleled its forward progress from my vehicle about 75 m distant. At 1905 it took flight and gained altitude by interchanging bouts of downwind flapping with tight spiral soaring turns into the wind. Its flight path brought it within 10 m of my vehicle and as it passed directly overhead, I stopped to photograph it. The bird promptly banked and with alternating flap-and-soar flight flew south about 250 m and alighted on a northfacing slope.

At this point, as I observed through the scope, a pair of Northern Ravens (*Corvus corax*) appeared and began to dive alternately at the condor. The condor then exhibited the following behavior: As each raven in flight drew within about 3 m of the condor standing on the ground, the condor would align the long axis of its body directly with the approaching raven and with mandibles parallel to the ground, attain a fully upright stance with the legs extended. It would then partially extend the wings away from the body while simultaneously raising the scapulars and wing coverts into an erect or "fluffed-out" configuration. The condor would very slightly dip its head down as the raven passed directly overhead, then take a brisk step or two forward and turn promptly to be in position to again face directly a new assault. I was too distant to determine if any vocalism accompanied this behavior, but the mandibles remained closed. After a series of swoops, one or both ravens would pause for 15 to 45 seconds before resuming their sorties toward the condor. During this interim, the condor would slowly retract its neck so that the back of the head descended to contact the ruff, the tarsi would flex to a half-folded position, and the wings would be slowly returned to a normal position against the body with the scapulars relaxing over the folded wings. The general pattern was repeated in six series of confrontations with the ravens over a 19 min period.

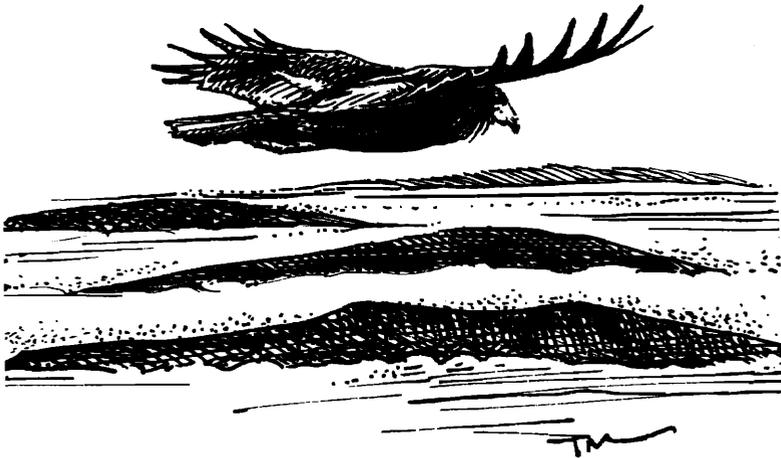
Koford (The California Condor, Dover, New York, 1957:118) describes a threat attitude exhibited by nestlings 8 to 12 weeks old as elicited by intruders at a nest site, but there are differences in posture and vocal response between his observations and

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those I observed in the fully fledged immature. The nestling noted by Koford "holds its head low in front of the body, opens its bill and protrudes its tongue, erects the interscapulars and raises the ruff . . . and gives the hiss-grunt." At 12 weeks, "the tail is held stiffly and is raised above the line of the back at an angle of about 30 degrees." The immature I observed held a markedly different posture and did not appear to vocalize.

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California Condor

Sketch by Tim Manolis