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van Els, Paul; Tello, Alejandro

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ANDEAN CONDOR (*Vultur gryphus*) FORAGES IN NON-NATIVE *Eucalyptus* TREES IN LIMA DEPARTMENT, PERU

Paul van Els¹ & Alejandro Tello²

¹School of Life Sciences, University of Nevada Las Vegas, Box 4009, 4505 S. Maryland Parkway, Las Vegas, Nevada 89154-4004. E-mail: paulvanels@yahoo.com
²Kolibri Expeditions, Calle Arias Schreiber 192 Of. 300, Miraflores, Lima, Perú.

El Condor Andino (*Vultur gryphus*) forrajea en árboles no nativos (*Eucalyptus*) en el departamento de Lima, Perú.

Key words: Andean Condor, Cathartidae, *Eucalyptus*, frugivory, Andes.

New World vultures commonly use trees for roosting, nesting, and resting. Even though this behavior is common in the smaller, forest-based species (*Cathartes, Coragyps, Sarcoramphus*), the larger condors (*Gymnogyps, Vultur*) are more restricted to rocky habitats. The California Condor (*Gymnogyps californianus*) has occasionally been observed making use of tall trees such as giant sequoia (*Sequoiadendron giganteum*) for nesting (Snyder et al. 1986). Fossil evidence indicates that this species occurred widely over forested eastern and sub-boreal North America during the Pleistocene (Steadman & Miller 1987). However, the Andean Condor (*Vultur gryphus*) has, to our knowledge, never been observed in trees. Here, we describe the use of an exotic tree species (*Eucalyptus* sp.) by Andean Condors in the department of Lima in central Peru. On 7 November 2011 around 14:00 h, we observed three condors, two adults and a subadult, taking turns landing in a tall *Eucalyptus* sp. (Fig. 1) in a chacra in the vicinity of Upica, close to the Autisha bridge in the Cañón de Santa Eulalia, Province of Huarochiri, Department of Lima, Perú (11°44′30.93″S, 76°36′34.74″W). Each of the birds spent a few minutes in the tree, to be replaced by a different individual. Individuals returned to the tree for a second or third visit after another left. The birds were seen from a distance of approximately 100 m using both 8 x 42 binoculars and a 50 x telescope. Several pictures were taken using a 300 mm telephoto lens. We observed the birds taking fruits and swallowing them. Birds were also seen taking inflorescences and leaves off branches, but we could not verify whether these were also swallowed or accidentally stripped off in search of fruit. A second tall tree in the vicinity was used less frequently. This lasted for at least an hour before the birds left. After the birds left,
we searched underneath the tree for evidence of foraging such as damaged fruits, discarded plant parts or guano. We only found a number of old fruits and broken off inflorescences. On 27 November 2011, an adult male was observed in the trees from at least 08:00 h until 14:00 h. After this, a group of five condors arrived and three of these, an adult male, an adult female and a subadult, remained to forage in the trees for approximately an hour. Even though AT frequently visited the region, prior to 7 November he never observed condors in trees. Turkey (Cathartes aura) and Black (Coragyps atratus) Vultures are known to occasionally consume fruit, including juniper (Juniperus) conelets (Hiraldo et al. 1991) and grapes (Vitis, Brown & Amadon 1968). Turkey Vultures in Brazil occasionally take fruits of the non-native oil palm (Elaeis guineensis, Pinto 1965). Frugivory in the two condor species has not been reported and no New World vultures are known to forage in Eucalyptus trees. Eucalyptus is mostly wind-dispersed and has hard, woody fruits (‘gumnuts’) that are generally not consumed and digested by birds. Geophagy to promote digestion of coarse food material in the gizzard is common in many birds (Brightsmith et al. 2006, Gionfriddo & Best 1996), and although mostly found in granivores (Gionfriddo & Best 1996), it is not unthinkable that condors use Eucalyptus fruits as a digestive aid. Furthermore, the fruits of Eucalyptus globulus, one of the most widely planted species in the Andes, contain a great amount of monoterpenes (Pereira et al. 2004), a substance hypothesized...
to have anti-parasitic properties for nesting raptors (Ontiveros et al. 2007). In the Neotropics, there is generally a reduction in avian species richness in Eucalyptus-dominated forests relative to native forests (Barlow et al. 2007, Hjarsen 1997, Machado & Lamas 1996, Marsden et al. 2001, Motta Jr. 1990, Willis 2003). The use of this ecologically harmful exotic tree by such rare and large-bodied scavengers as the Andean Condor is remarkable and attests to the condor’s ecological flexibility.

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