First record of Turkey Vultures (*Cathartes aura*) nesting on Hispaniola

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Photo: Ryan Phillips
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Abstract Though the Turkey Vulture (Cathartes aura) is present year-round on Hispaniola, nesting for this species has not been documented in either Haiti or the Dominican Republic. During March to June 2011 and 2012, we located four active Turkey Vulture nests in the Dominican Republic: three in Los Haitises National Park and one on private land near the town of Pedro Sanchez. This paper provides the first nesting record of Turkey Vultures on Hispaniola, a description of these four nests, and general information on three other previously unreported nests.

Keywords Cathartes aura, Dominican Republic, Hispaniola, Los Haitises National Park, nesting records, Turkey Vulture

Results and Discussion
Between 2011 and 2012, we discovered four Turkey Vulture nests in the Dominican Republic; three within Los Haitises National Park (LHNP, 19°01'45.0"N, 69°43'44.2"W) close to the town of Los Limones, in the northeastern region of the Dominican Republic; and one in Loma La Herradura (18°51'35.9"N, 69°06'12.6"W) near the town of Pedro Sanchez, on property owned by Central Romana, Ltd. LHNP covers approximately 1,600 km² (Woolaver 2011) with elevations ranging from sea level to 380 m, and is composed principally of limestone karst hills (mogotes), valleys, caves, and sink holes (Wiley and Wiley 1981, Latta 2005). The park is made up of “blocks and fragments of humid broadleaf forest intermixed with human-cultivated
areas consisting of conucos (e.g. mixed plantings of root crops, banana, citrus and cocoa), coconut plantations, pastures, grasslands and secondary forests in various states of regeneration” (Thorstrom et al. 2005), and some mangrove habitat on the coastal side. The Loma la Herradura site is located approximately 30 km southeast from LHNP in the Cordillera Oriental where elevations range from 89 m to 570 m. The landscape here is also a mixture of human-cultivated areas, ranch land that supports herds of cattle, and some of the last remaining intact forest in an otherwise heavily degraded region (MGC pers. obs.).

Between February and early June 2011 and 2012 we monitored a nesting population of approximately 35 pairs of the critically endangered Ridgway’s Hawk (Buteo ridgwayi) in LHNP. This involved hiking long distances in search of nests, nesting pairs, and individual hawks. During this time, we observed Turkey Vultures throughout the park and they appeared to be very common. On the morning of 4 March 2011, JGA witnessed a pair of vultures copulating in an unidentified tree in an agricultural field within the park boundaries (19°03’02.5”N, 69°44’33.9”W). On 9 March 2011, MGC and HJP flushed an adult Turkey Vulture from a small limestone cave (19°02’36.7”N, 69°42’32.2”W, 195 m asl) located in the middle of an open field. Ferns (Pteridium aquilinum) further obscured the cave. Upon closer inspection, we found two large eggs inside the cave. There was no observable nesting material and the eggs were lying directly on the substrate, about 0.6 m back from the cave entrance. The cave opening was approximately 0.75 m from the ground, and measured 128 cm tall by 110 cm wide. It extended 0.4 m back from the entrance beyond which a long tunnel tapered into a recessed cove too small for us to access.

On 10 April of that year, we checked the nest to determine its status. A large fire had swept through the area days prior to this visit, burning within close proximity of the nest. We did not observe the adults, but a close inspection of the cave revealed the presence of two downy chicks sleeping at the entrance. Upon our approach, the chicks retreated to the small cove at the back of the tunnel out of our view and began to hiss, which is a well-documented reaction of young to a perceived threat (Davis 1983). Based on their plumage characteristics, we estimated the young to be approximately 21 days old (see Nelson et al. 2009), placing their hatch date on or around 20 March. Assuming that incubation is approximately 40 days, as observed in this species in other areas, and that the young fledged at about 67 days after hatching (Kirk and Mossman 1998), based on the age of the young, we estimated laying date at 9 February and predicted fledging by 26 May. Our field season ended shortly thereafter, so we did not return to the nest site to confirm if the young survived to fledging.

The following year, on 1 March 2012, HJP returned to this nest site, but it appeared to have been abandoned. HJP observed ashes and burnt logs inside the cave, suggesting someone had deliberately made a fire there. There was no evidence of the adult vultures, eggs, or young.

Two additional nests were discovered in 2012 in LHNP, both located inside caves. The first (19°02’44.7”N, 69°44’07.7”W, 232 m asl; Fig. 1) was located on 19 March 2012 by HJP and volunteer Christine Hayes during routine monitoring of the Ridgway’s Hawk. The nest contained one chick estimated to be 26 days old.
(19°15’37.2"N, 70°09’17.9"W), by Eudes and Angelis Paulino and field assistants from the Grupo Acción Ecológico. The nest was found at an elevation of 534 m asl in a small, sheltered opening, which was created by a pile of very large rocks at the top of a hill in a cattle pasture. The cave was further obscured by long grasses and ferns. The nest contained two eggs. The nest was periodically monitored; one egg hatched and the chick was assumed to have fledged. The second egg was collected when it was clear that it would not hatch, and it remains in a private collection. Two other previously unreported nests of which we are aware include one located on 23 June 2009 in Cap Cana, Altagracia Province (18°28’08.8"N, 68°25’31.5"W), which was found by local workers and contained one downy chick; and another, located near a slaughterhouse in Bani, Peravia Province (18°26’50.2"N, 70°19’51.4"W), was discovered when individuals were seen trying to sell the young chicks (J. Brocca pers. comm.). Fewer details are available about these two nests.

Nearly the entire island of Hispaniola, including LHNP and other protected areas, has been affected by human activity, and especially by clearing for agriculture through slash-and-burn techniques (Wiley 1986, Thorstrom et al. 2005). This has had an effect on the survival of many species, such as the Ridgway’s Hawk (Thorstrom et al. 2005). However, in the case of the Turkey Vulture, which is more widespread across the Dominican Republic and Haiti (Latta et al. 2006), it is unclear how anthropogenic activities throughout the island could affect, either positively or negatively, the availability of nest sites and nesting success for this species. Further studies of the ecology and reproductive biology of this species are needed.

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