(0. Beingolea pers. observ.). In July 1994, two of these pairs raised four young each. A third site inhabited by a pair was not visited. Although large portions of the Peruvian Andes have not been searched, it is likely that the finding of these pairs suggests that the breeding range for peregrines occurs along the entire Andean chain into central Ecuador. It is not known if they extend along the Andes beyond Ecuador or into the Cordillera Central and Oriental of Colombia and Cordillera de Merida of Venezuela; these areas have been extensively surveyed by ornithologists and it appears doubtful.

With this increase, peregrines have moved into urban Lima city. In the first week of June 2001, Beingolea was told about a pair of hawks that were excreting on the walls of the skyroom of the abandoned 20-floor, former Hotel Crillon in downtown Lima. Beingolea visited the building and confirmed the presence of a female peregrine beside a cavity, caused by the removal of a large cement block on the upperside of a window's roof, just below the hotel's 20th floor skyroom.

On 2 July 2001, Beingolea visited the building again and found a male peregrine incubating a single egg; the female was nearby eating a Rock Dove (*Columba livia*). On 8 August, he visited the building and found one eggshell but could not assess the number of eggs or nestlings, but on 14 August there were three nestlings about 5–7 d old On 14 September one young was found dead, possibly due to a *Trichomonas* infection; the other two seemed healthy Three more pairs were regularly sighted in Lima along with other territorial single individuals during the Austral winter 2001. The sighting of an immature inside Lima during late August 2000 (J. Otero pers. comm.) suggested that in fact they were already breeding inside urban Lima city before our observations.

Finally, Beingolea found fledglings between 18 July and late September indicating about a 10 wk span of egg laying for pairs nesting at 12°S. Calculating that fledgling occurs between 11 and 12 wk after onset of eggs (Cade 1988), the earliest laying for the pair having fledglings in 18 July should have taken place during the last week of April (1993) and the latest lying during the first week of July (2001). In 2001, there were a total of six resident pairs within Lima and her outskirts.

It is generally thought that subtropical raptors regularly have smaller clutches than populations elsewhere (Newton 1979, Population ecology of raptors. Buteo Books, Vermillion, SD U.S.A.), but the Peruvian nests checked averaged 3.71 young/pair, at the high end of peregrine fledging numbers. A failed attempt, due to predation, also had four eggs, further suggesting that large clutch sizes are common.

The breeding season for Peruvian peregrines differs from those in central to southern Chile and Argentina; the latter breed in the Austral spring, but central Peruvian peregrines nest during the Austral fall and winter. Distance and different breeding seasons might restrict gene flow between these populations. Lack of gene flow and different climatic and environmental selection pressures probably explains the morphological differences. Northern birds are paler, less heavily marked on the breasts and smaller, about 800 g for northern and 950 g for southern females and about 550 g for northern males (with one at 480 g) and 650 g for southern males (O. Beingolea unpubl. data, see White 1989). Further studies on the geographic differences within South American populations are needed.

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LONE HARRIS'S HAWK KILLS GREAT BLUE HERON

The Harris's Hawk (*Parabuteo unicinctus*) is a neotropical species whose range extends into the southwest U.S., resident from southeast California (Colorado River area; irregularly), south and central Arizona, to southwest and south Texas (Bednarz 1995, *In* A. Poole and F. Gill [EDS.], The birds of North America, No. 146. The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union, Washington, DC, U.S.A.). In New Mex-

ico, the species nests across the southern tier of counties and north in the Rio Grande Valley to Sierra County (S. Williams pers. comm.).

Published accounts of Harris's Hawk food habits report the majority of its prey as (in order of dominance) medium-sized to relatively large mammals (particularly rabbits and hares [Leporidae]), birds, and reptiles (Mader 1975, *Living Bird* 14:59–85; Whaley 1986, *Raptor Res.* 20:1–15; Bednarz 1988a, *Condor* 90:311–323; Bednarz 1995). Bent (1937, *Bull. U S. Natl. Mus.* 167:142–147) listed relatively large avian prey items as Common Moorhen (*Gallinula chloropus*), night-herons (*Nycticorax nycticorax, Nyctanassa violacea*), Snowy Egret (*Egretta thula*), and Green-winged Teal (*Anas crecca*); Whaley (1986) observed remains of a Cooper's Hawk (*Accipiter cooperii*) in one nest in Arizona. Here, we report our observations of an attack on a Great Blue Heron (*Ardea herodias*) by a Harris's Hawk.

At ca. 1630 H on 21 July 2000, a juvenile (less than 12 mo) Great Blue Heron waded in a puddle near our camp in the Gila National Forest Bird Habitat Area, Grant County, New Mexico. The bird did not fly as we approached to within 5 m, but slowly walked off into the young mesquite (*Prosopis glandulosa*) growth. We assumed it was in the area to feed on the abundant grasshoppers (Orthoptera). On at least two prior occasions, we had seen a Great Blue Heron roost in nearby trees. About 2 hr later, we heard a prolonged croaking cry and investigated. An immature Harris's Hawk flew off the now prostrate heron and perched ca. 50 m away. Its plumage (white in the wings and underparts) indicated that the hawk was an immature bird (Clark and Wheeler 1987, A field guide to hawks of North America, Houghton Mifflin Co., Boston, MA U.S.A.). The heron was still alive, but it died within a minute. We detected no obvious external injuries when we examined it, but no internal exam or necropsy was performed. We are uncertain why it did not fly or defend itself from apparent attack. The hawk remained perched in the tree for about 10 min before flying away. We saw the hawk later that day and on subsequent days, but it never returned to the heron carcass.

The age of the bird supports prior observations on hawk hunting behavior. Generally, immature solo hawks (particularly in falconry) exhibit more reckless and daring behavior than birds in adult plumage, often attacking inappropriately large prey (J. Bednarz and J. Coulson pers. comm.). Perhaps the Harris's Hawk's age and inexperience led it to attack the Great Blue Heron.

We believe this account to be the first recorded for Harris's Hawk predation upon a bird as large as the Great Blue Heron. The mean mass of this hawk's largest known avian prey (Common Moorhen, 334 g; Green-winged Teal, adult males, 364 g; Snowy Egret, 371 g; Cooper's Hawk, adult females, 529 g; and Black-crowned Night-heron, 883 g) is much smaller than that of the Great Blue Heron (2204–2576 g [Dunning 1993, Body weights of 686 species of North American birds. International Wildlife Rehabilitation Council, Suisun, CA U.S.A.]). A single Harris's Hawk is thus capable of attacking and killing much larger birds than previously reported.

Although the Great Blue Heron is the largest documented avian prey taken by a wild Harris's Hawk (captive Harris's Hawks flown in falconry have incidentally captured healthy Great Blue Herons [T. and J. Coulson pers. comm.]), its weight is less than that of adult female black-tailed jackrabbits (*Lepus californicus,* >3000 g) commonly taken by hunting groups (Bednarz 1988b, *Science* 239:1525–1527),and occasionally by solitary hunting Harris's Hawks (Brannon 1980, The reproductive ecology of a Texas Harris's Hawk [*Parabuteo unicinctus harrisi*] population. M.S. thesis, University of Texas, Austin, TX U.S.A.).

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