RECENT RECORDS OF CROWNED EAGLES (HARPYHALIÆTUS CORONATUS) FROM ARGENTINA, 1981–2000

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Key Words: Crowned Eagle; Harpyhaliaetus coronatus; new records; conservation; status; Argentina.

The Crowned Eagle (Harpýhaliaeætus coronatus) is a vulnerable species whose distribution is limited to south-central South America (Collar et al. 1992, García-Fernández et al. 1997). The species has been protected in Argentina since 1954 and is listed as a threatened species in Brazil and Paraguay. The ecology of this large eagle is poorly known. It feeds on a variety of vertebrates including snakes (e.g., Waglerophis merremi), birds, skunks (Conepatus spp.), armadillos (Dasypodidae), and weasels (Collar et al. 1992). The nest of the Crowned Eagle consists of a large platform placed in trees where one egg is laid (De la Peña 1992, Bellocq et al. 1998). Naturally low population numbers and habitat fragmentation have been recognized as primary contributors to the eagle’s current status (Collar et al. 1992). Previous studies on habitat use by this eagle identified the potential negative effects of continuing afforestation (Bellocq et al. 1998). Over 60% of the Crowned Eagle records are from Argentina, where it occurs primarily in shrublands, savannas, and semi-open woodlands (Collar et al. 1992, Bellocq et al. 1998, Gonnet and Blendinger 1998). Crowned Eagles were also reported recently in subtropical rainforests (Chébez et al. 1998, Gonnet and Blendinger 1998). Here, we report new records of Crowned Eagles and integrate them with the previous information on this species from Argentina for 1981–2000.

Methods

Road surveys for raptors were conducted in the northwest portion of Santa Fe province, north-central Argen-
Figure 1. Observation records of Crowned Eagles (*Harpyhaliaetus coronatus*) from Argentina during 1981–2000 (see Appendix for details on records). Zones A (northwestern Santa Fe), B (northeastern Mendoza and northern San Luis), and C (central La Pampa) are areas with a high number of records.

We observed four Crowned Eagles during the raptor survey (west of Zone A, Fig. 1). The survey was conducted along 210 km of road, driving north at a speed of 60–80 km/hr during 21 (from Nueva Italia to Tostado) and 22 November 2000 (north of Tostado). Raptor counts were made by one observer (who was not driving) while in transit, and occasional stops were made for identification and counting of individuals in groups.

We compiled information and identified locations for records of Crowned Eagles from Argentina for the period 1981–2000. Gonnet and Blendinger (1998) compiled most records from 1987–97. For each record, we obtained the following information (when available): location, geographic coordinates, province, date, number of individuals, and source. When not provided in the source, we obtained geographic coordinates at the Instituto Geográfico Militar (IGM) or contacted observers to obtain complete information. Reference numbers were basically assigned for records from north to south.

**RESULTS AND DISCUSSION**

A total of 343 individual raptors was recorded during the road survey in 2000; these included 161 Swainson’s Hawks (*Buteo swainsoni*), 114 Crested Caracaras (*Polyborus plancus*), 56 Black Vultures (*Coragyps atratus*), four Crowned Eagles (*Harpyhaliaetus coronatus*), four Black-chested Buzzard-Eagles (*Geranoaetus melanoleucus*), two Chimango Caracaras (*Milvago chimango*), one Roadside Hawk (*Buteo magnirostris*), and one Snail Kite (*Rostrhamus sociabilis*).

We observed four Crowned Eagles during the raptor...
survey and one additional individual while traveling around the area. We were able to identify distinguishing plumage features of each juvenile indicating that we observed different individuals. All individuals were seen between 29°-30°S and 61°-62°W, where the land is used primarily for ranching.

On 20 November 2000, an adult and a juvenile eagle were observed at Hwy 2, 20.5 km north of Nueva Italia (29°47’S, 61°32’W; record number 32 in Fig. 1). The adult was perched on an electric pole and the juvenile was on the ground holding a snake (Philodryas patagoniensis) in its talons. The surrounding habitat had two vegetation strata, trees and grasses, where Geoffroea decorticans (height about 6 m) dominated the canopy covering 40–60% of the ground surface.

On 20 November 2000, a juvenile was seen perched on a power pole at Hwy 2, 37 km south of Tostado (29°26’S, 61°43’W; record number 27 in Fig. 1). We were able to approach the base of the pole without flushing this eagle. The habitat was a Prosopis savanna with sparse G. decorticans.

On 21 November 2000, we observed a juvenile eagle perched on a Prosopis tree (height about 6 m), on Hwy 95, 21 km north of the intersection with Hwy 2 (29°07’S, 61°45’W; record number 21 in Fig. 1). The eagle was perched in a pasture with isolated Prosopis where cattle grazed. Surrounding fields were cultivated with sunflower.

On 21 November 2000, we recorded a juvenile eagle while traveling around the area. The eagle was perched on a fence pole on Hwy 13, 18.5 km south of the intersection between Hwys 13 and 98 (29°26’S, 61°03’W; record number 26 in Fig. 1). The habitat was a pasture where Spartina spp. was the most common grass (60–80% cover).

We compiled 72 records from Argentina for 1981–2000 (record numbers in Appendix correspond to location numbers in Fig. 1). The three zones with a high frequency of records (Fig. 1) have a semiarid climate, and each include a portion of two phytogeographic regions (following Cabrera 1971), and the ecotone between them. Zone A is located in the northwestern portion of Santa Fe province. In the northern part of this zone (Chaqueña region, de las Sabanas District), vegetation types include savannas of Elionurus muticus in the upper areas and Spartina argentinensis in the lower areas. In the southern part of zone A (El Espinal region, del Algarrobo District), close to open woodlands, Prosopis spp. and G. decorticans dominate the landscape. The area is affected by afforestation and the land is primarily used for ranching. G. decorticans forests occur in areas disturbed by ranching. Zone B comprises northeastern Mendoza and northern San Luis provinces. In northern San Luis (Chaqueña region, Serrano District), the original woodlands of Schinopsis spp. were replaced by shrublands with isolated woodlots of Prosopis spp. In eastern Mendoza (Monte region), the primary vegetation type is a shrubland dominated by Larrea spp. Other shrub species include Monttea aphylla, Bougainvillea spinosa, Prosopis alpataco, and Chuquiraga erinacea. Zone C is located in central La Pampa province.

In summary, we reported four new records of Crowned Eagles (including five individuals), compiled and provided details of records in Argentina for 1981–2000, and identified three zones with high frequency of recent records. Based on this study, we suggest the following priorities for research and conservation of the Crowned Eagle: (1) complete surveys along the Espinal phytogeographic region, (2) identify variables associated with high frequencies of eagle sightings at larger geographical scales (e.g., landscape), and (3) conduct studies on reproductive success and mortality to identify viable populations.

RESUMEN.—El águila coronada (Harpyhaliaetus coronatus) es una especie vulnerable y rara de ver. Se observaron cuatro ejemplares durante un relevamiento de rapiques por carretera a lo largo de 210 km, y un individuo adicional cuando se recorrió el área en el centro-norte de Argentina (Santa Fe). Se compilaron los registros de Argentina para el periodo 1981–2000 y se identificaron tres zonas de alta frecuencia de registros recientes. La zona ubicada en el noroeste de la provincia de Santa Fe parece
ser la más apropiada para intensificar investigación y acciones de conservación, debido a su posición relativamente central dentro de los límites de distribución de la especie y su alta frecuencia de registros recientes afuera de reservas naturales.

[Traducción de los autores]

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LITERATURE CITED


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Appendix  The record number, number of sighted individuals, locality, geographic coordinates, and source of observation records of Crowned Eagles from Argentina for 1981–2000.

<table>
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<tr>
<th>RECORD NO.</th>
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<th>LOCALITY, PROVINCE</th>
<th>GEOGRAPHIC COORDINATES</th>
<th>SOURCE</th>
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<td>16-27 Jul 1989</td>
<td>P.N. Baritú, Salta</td>
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<td>R.P. Copo, Santiago del Estero</td>
<td>26°05'S, 62°00'W</td>
<td>Collar et al. (1992)</td>
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<td>Bellocq et al. (1998)</td>
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<td>Kaspar et al. (1999)</td>
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\(^1\) P.N.: National Park, R.P.: Provincial Natural Reserve.
\(^2\) Geographic coordinates obtained by the authors.
\(^3\) Coordinates provided by Rodríguez Goñi (pers. comm.).
\(^4\) Nesting site.