

## LETTERS

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### OBSERVATIONS OF INTRAGUILD NEST PREDATION INVOLVING THREE SPECIES OF RAPTORS IN ARGENTINA

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Predation and competition are considered key features that shape the dynamics and structure of biological communities and represent important selective pressures (Schoener 1983, Preisser et al. 2005). Nest predation is often cited as one of the most frequent causes of breeding failure among birds, and is suggested to be especially high in tropical populations (Skutch 1985, Martín 1995, Söderström 1999, Stutchbury and Morton 2001, Ibáñez-Álamo et al. 2015). In a study of a neotropical raptor community, nest predation accounted for more than 50% of nest failure, but in most cases, the predator's identity could not be determined with certainty (Whitacre and Burnham 2012). Early-life-stage raptors such as nestlings, fledglings, and dispersing juveniles suffer a high rate of predation and some such predation can be attributed to other raptor species (Luttich et al. 1971, Sergio et al. 2005, Sunde 2005). Considered an extreme case of interference competition, intraguild predation is defined as the act of killing and eating a species that uses similar resources, and is often considered an important method of species segregation among predators (Carothers and Jaksic 1984, Polis et al. 1989, Polis and Holt 1992, Donadio and Buskirk 2006, Sergio and Hiraldo 2008, Newton 2013). Intraguild predation in raptors has been described as a phenomenon in which bigger species prey on smaller ones, and it is considered a widespread, but often overlooked, phenomenon among raptors (Polis and Holt 1992, Sergio and Hiraldo 2008, Björklund et al. 2016).

From 2010 to 2016, we conducted raptor nest observations (from September to December) at El Destino Nature Reserve (35°08'S, 57°23'W) and adjacent

areas on the coast of La Plata River, Buenos Aires Province, Argentina. The study site was located in the Pampas region and consisted of a mosaic of native grasslands, seasonal flooded pastures, and patches of *talar* forest dominated by *talar* (spiny hackberry; *Celtis ehrenbergiana*) and *coronillo* (*Scutia buxifolia*; Horlent et al. 2003, Torres and Arturi 2009). In the western part of our study area, the *talar* forest was associated with karst deposits arranged in elevated ridges (*cordones*) that form lines parallel to the coastline and alternate with grasslands in the swales between them (Horlent et al. 2003). The assemblage of diurnal raptors in our study area consists of 12 resident species of two families (eight in Accipitridae and four in Falconidae): Snail Kite (*Rostrhamus sociabilis*), White-tailed Kite (*Elanus leucurus*), Sharp-shinned Hawk (*Accipiter striatus*), Cinereous Harrier (*Circus cinereus*), Long-winged Harrier (*Circus buffoni*), Harris's Hawk (*Parabuteo unicinctus*), White-tailed Hawk (*Geranoaetus albicaudatus*), Roadside Hawk (*Rupornis magnirostris*), Southern Caracara (*Caracara plancus*), Chimango Caracara (*Mitvago chimango*), Aplomado Falcon (*Falco femoralis*), and American Kestrel (*Falco sparverius*). Agonistic interactions between several of these species have been documented in similar habitat south of our study area (Baladrón and Pretelli 2013).

During this study, we recorded two events of intraguild nest predation involving Southern Caracaras, Long-winged Harriers, and Roadside Hawks. On 13 December 2013, a camera trap focused on a Roadside Hawk nest recorded the predation of two nestlings approximately 21–23 d old by an adult Southern Caracara (Fig. 1). The audio of the camera trap video recorded the vocalization of a second Southern Caracara (most likely present in the nesting tree) and at least one of the Roadside Hawks while the predation event happened. We suspect that this predation event was performed by a local caracara pair due to the presence of two individuals and because the Roadside Hawk nest was located 430 m from an occupied caracara nest.

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