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FOOD HABITS OF THE STRIPED OWL (*ASIO CLAMATOR*) IN BUENOS AIRES PROVINCE, ARGENTINA

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KEY WORDS: *Striped Owl*; Asio clamator; *food habits*; *Argentina.*

The Striped Owl (*Asio clamator*) is a widespread species from Mexico through tropical and subtropical South America to Argentina (Grossman and Hamlet 1964, Canevari et al. 1991, Holt et al. 1999). It inhabits deciduous seasonal forests, lowland seasonal forests, gallery forests, lowland savannas, desert forests, and grasslands (Grossman and Hamlet 1964, Canevari et al. 1991, Holt et al. 1999). Despite its widespread distribution, the status of the Striped Owl is poorly known (Burton 1973, Holt et al. 1999) and it is considered to be a rare species in Buenos Aires Province in Argentina (Narosky and Di Giacomo 1993).

Studies of the Striped Owl in Argentina have focused mainly on anecdotal aspects of its biology and breeding ecology (e.g., Bledinger et al. 1987, Martínez et al. 1996). Its diet is poorly studied but the limited information that is available indicates that it preys mainly on small mammals (Grossman and Hamlet 1964, Burton 1973, Phelps and Meyer de Schauensee 1994) followed by birds, reptiles, and insects (Holt et al. 1999). Here, we report on the diet of Striped Owls in the southernmost extreme of its distribution in the southeastern portion of Buenos Aires Province, Argentina.

METHODS

Our study was carried out in Mar Chiquito Biosphera Reserve (37°40'S, 57°23'W), Buenos Aires Province, Argentina. The reserve covers 30 000 ha and supports a diverse array of habitats including ponds, salt marshes,

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grasslands, woodlands, exotic tree plantations, and agricultural fields.

We found a pair of Striped Owls in an area of tala (*Celtis tala*) forest at Nahuel Rucá Ranch. The tala forest is derived from thorn forests (Espinal) and this relict patch represents the southernmost extreme of Espinal forest in Argentina. The patch covered a 6 ha area and was surrounded by a pond and grazed native grassland. There were a few houses and a plantation of eucalyptus (*Eucaliptus* spp.) trees nearby.

From August to November 1997, pellets and prey remains were collected in different plucking stations and roosting sites of the owls. Bird, mammal, and insect remains were identified based on bones, feathers, bills, hair, dentaries, and exoskeletons, and compared with the collections of Laboratorio de Vertebrados, Facultad de Ciencias Exactas y Naturales-Universidad Nacional de Mar del Plata and Museo Municipal de Ciencias Naturales "Lorenzo Scaglia" de Mar del Plata. The majority of prey were identified to species level. Bird and mammal weights were obtained from the literature (Salvador 1988, Camperi 1992, Redford and Eisenberg 1992) and unpublished data (M. Kittlein pers. comm.). A weight of 1 g was assigned to each insect prey species (Jiménez 1993).

RESULTS AND DISCUSSION

A total of 56 prey items was identified from 34 pellets and 3 prey remains (pile of feathers). Rodents were the main prey (55.4%) followed by birds (42.9%) and insects (1 8%, Table 1). *Rattus* spp. was the most common prey item (43%). Among birds, Rufous-collared Sparrows (*Zonotrichia capensis,* 23.2%) and Eared Doves (*Zenaida auriculata,* 17.9%) were most frequently taken. Other items comprised only a small fraction of the diet (16.2%).

Prey weights ranged from a low of 1 g in the case of insects to a high 630 g in the case of *Cavia aperea* (Table 1). Rodents comprised up to 81.5% of prey by weight and *Rattus* spp. contributed with the highest value (66.9%) followed by *Cavia aperea* (14%). The occurrence of adult *C. aperea* in the diet was surprising, since they weigh more than one and a half times as much as Striped Owls (maximal weight recorded of Striped Owl is 485 gr, Salvador 1988). We were not certain if *C. aperea* were eaten as carrion or actually hunted but Striped Owls are highly adapted to hunt live prey (Holt et al. 1999). The biomass contribution of birds was minor (20.1%) with Eared Doves contributing the largest amount (12%, Table 1). Other studies have confirmed that birds are common in the diets of Striped Owls (Grossman and Hamlet 1964, Burton 1973, Phelps and Meyer de Schauensee 1994, Holt et al. 1999).

Our results agree with those of Martínez et al. (1996) who studied the diet of Striped Owls in an area of shrub and exotic trees in Laguna de Los Padres Reserve, located 35 km north of Nahuel Ruca in Buenos Aires Province. They recorded seven bird and mammal species in the diet; three of which (*Reithrodon auritus, Holochilus brasiliensis,* and *Carduelis magellanica*) were absent in the diet of the Striped Owls we studied.

Table 1. Frequency of prey items, weight of individual prey and total percent biomass of prey in the diet of Striped Owl (*Asio clamator*) in Mar Chiquito Biosphera Reserve, Buenos Aires Province, Argentina.

PREY	FREQUENCY (%)	INDIVIDUAL WEIGHT (g)	TOTAL BIOMASS (%)
Aves			
Columbiformes			
Columbidae			
Zenaida auriculata	17.9	134.6	15.0
Passeriformes			
Emberizidae			
Sicalis luteola	1.8	16	1.8
Zonotrichia capensis	23.2	22.5	3.3
Mammalia			
Rodentia			
Caviidae			
Cavia aperea (adult)	3.6	630	7.0
Cavia aperea (young)	1.8	315	7.0
Muridae			
Akodon azarae	1.8	21	0.2
Calomys musculinus	3.6	10	0.2
Oryzomys flavescens	1.8	17	0.2
Rattus spp.	43.0	250	66.9
Insecta			
Coleoptera			
Scarabaeidae			
Sulcophanaeus menelas	1.8	1	0.0

The Striped Owl is typically found in woodlands, forests, and savannas of tropical and subtropical zones (Grossman and Hamlet 1964). Our data show that it also occurs in the temperate-warm zone that corresponds to the Pampean Fitogeographic (Chaqueño Dominion, Cabrera 1976). In the past, this zone was dominated by tall grasslands without trees. Perhaps Striped Owls occur here because there is a natural corridor of tala forest which extends from the Entre Rios Province to Mar Chiquita Lagoon (Vervoorst 1967).

RESUMEN.—Se presenta información sobre la dieta del Lechuzón Orejudo (*Asio clamator*) en base al análisis de pellets ($N = 34$) y restos presa ($N = 3$), en el extremo Sur de su distribución Provincia de Buenos Aires, Argentina. Se identificaron 56 items presa, correspondiendo el 55.4% a los mamíferos, el 42.9% a las aves y el 1.8% a los insectos. El rango de pesos presa consumidos por esta lechuza fue de 1g a 630 g. El ítem mejor representado tanto en número (43%) como en biomasa (66.9%) fue *Rattus* spp. seguido en importancia numérica por el Chingolo Común (*Zonotrichia capensis,* 23.2%) y la Torcaza (*Zenaida auriculata,* 17.9%). A nivel de las aves el mayor aporte de biomasa fue dado por *Z. auriculata* (15%).

[Traducción de Autores]

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DIET OF BREEDING CINEREOUS HARRIERS (*CIRCUS CINEREUS*) IN SOUTHEASTERN BUENOS AIRES PROVINCE, ARGENTINA

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KEY WORDS: *Cinereous Harrier*; Circus cinereus; *breeding diet*; *trophic niche breadth*; *Argentina.*

The Cinereous Harrier (*Circus cinereus*), one of two South American harriers, is widespread and distributed from Colombia and Ecuador, through Perú, Bolivia and Paraguay, southwestern Brazil to Tierra del Fuego and Islas Malvinas (Grossman and Hamlet 1964, Canevari et al. 1991, del Hoyo et al. 1994). In Argentina, it is most common in Patagonia and Islas Malvinas (Narosky and Yzurieta 1987) but it has also been recorded throughout northwestern, central and, occasionally, the northeastern parts of the country (Canevari et al. 1991). The Cinereous Harrier inhabits savannas, grasslands, wetlands, marshes, lagoons, shrubsteppes, and shrublands 0–4500 m elevation (Jiménez and Jaksic 1988, Canevari et al. 1991, Narosky and Di Giacomo 1993, del Hoyo et al. 1994).

Little has been reported about the Cinereous Harrier The few previous studies of this species have focused on aspects of ecology and behavior (Jiménez and Jaksic

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