

# New records of small mammals in the diet of the buff-fronted owl, *Aegolius harrisii* and the black-and-white owl, *Strix nigrolineata*, along with a review of mammal prey of owls in Colombia

## Nuevos registros de pequeños mamíferos en la dieta del mochuelo canela, *Aegolius harrisii* y del búho carinegro, *Strix nigrolineata*, con una revisión de mamíferos presas de búhos y lechuzas en Colombia

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The diet of Colombian owls has been scarcely studied. The consumption of bats and other small mammals has been recorded for *Aegolius harrisii* and *Strix nigrolineata* in Central and South America; however, there was no information on this topic in Colombia for both species. We present new observations of the predation of mammals by owls in Colombia and a brief review of historical records. We reported the attempt of consumption of a bat of genus *Platyrrhinus* by the buff-fronted owl (*Aegolius harrisii*) and the presence of bats (*Dermanura* and *Rhogeessa*) and shrews (*Cryptotis*) in one pellet of the black-and-white owl, *Strix nigrolineata*, in the Andes of Colombia. The literature review showed that at least 30 mammal species have been recorded in the diet of 8 additional owl species in the country. Rodents are the prey with the highest number of reports, which include taxa from forested, urban, and peri-urban areas. This information might be useful for subsequent studies on the possible effects of habitat loss on mammal consumption by owls and the role as a controller of zoonotic agent hosts.

**Key words:** Andes; coffee plantations; Chiroptera; diet; Eulipotyphla; Rodentia; small mammals.

La dieta de los búhos y lechuzas de Colombia ha sido escasamente estudiada. El consumo de murciélagos y otros pequeños mamíferos ha sido registrado para *Aegolius harrisii* y *Strix nigrolineata* en otros países de Centro y Sudamérica; sin embargo, no había información sobre el tema para Colombia. Presentamos nuevas observaciones de la depredación de mamíferos por búhos en Colombia y una breve revisión de registros históricos. Reportamos el intento de consumo de un murciélago del género *Platyrrhinus* por parte del búho bicolor (*Aegolius harrisii*) y la presencia de murciélagos (*Dermanura* y *Rhogeessa*) y musarañas (*Cryptotis*) en una egagrópila del búho carinegro (*Strix nigrolineata*), en los Andes de Colombia. La revisión de la literatura y datos de colecciones biológicas arrojó un total de al menos 30 especies de mamíferos que han sido registradas en la dieta de 8 especies adicionales de búhos en el país. Los roedores son las presas con mayor número de reportes, que incluyen taxa de bosques, áreas urbanas y periurbanas. Esta información puede ser útil para estudios posteriores sobre los posibles efectos de la pérdida del hábitat en el consumo de mamíferos por búhos y su papel como controladores de hospederos de agentes zoonóticos.

**Palabras clave:** Andes; cafetales; Chiroptera; dieta; Eulipotyphla; mamíferos pequeños; Rodentia.

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Small mammals and other vertebrates constitute a significant portion of the diet of owls (Strigiformes). This preference can be attributed to the fact that smaller individuals are more readily and efficiently captured and consumed by these predators (Bueno and Motta-Junior 2009). Studies on trophic habits is one of the most developed areas of research within the biology and ecology of Neotropi-

cal owls (Tytonidae and Strigidae), but most of these have evaluated the diet of a limited number of species (Bellocq 2000; Bó et al. 2007; Cadena-Ortiz et al. 2013; Mella et al. 2016; Restrepo-Cardona et al. 2018). In Colombia, one of the countries that hold a large diversity of owls, with 28 species (Ayerbe Quiñones 2018; Chaparro-Herrera et al. 2021; Hilty 2021), the available information about their

ecology, especially of what mammals are included in their diet, is scarce ([Chaparro-Herrera et al. 2015](#); [Restrepo-Cardona et al. 2018](#)). Some species such as the American barn owl, *Tyto alba* (considered as *T. furcata* by [Uva et al. 2018](#)) have been thoroughly studied in terms of its diet. Through these studies, a wide range of small mammal species has been identified as components of the barn owl's diet ([Delgado-V. and Cataño 2004](#); [Delgado-V. and Calderón-F. 2007](#); [Delgado-V. and Ramírez 2009](#)). In contrast, other species, rare or randomly distributed, like buff-fronted owl (*Aegolius harrisii*), are scarcely documented ([Penagos et al. 2018](#)), and consequently there is a lack of information regarding its diet. Another example is the black-and-white owl (*Strix nigrolineata*), a species for which comprehensive diet data is currently unavailable for Colombia.

In particular, the buff-fronted owl, *A. harrisii*, is a little-known species distributed in South America ([Córdoba and Ahumada 2005](#); [König et al. 2008](#); [Penagos et al. 2018](#)). In Argentina and Brazil, its diet includes insects, rodents, and bats ([Barlow and Cuello 1964](#); [Willard et al. 1991](#); [Barriónuevo et al. 2008](#)). It lives mainly in subtropical and tropical humid montane forest, and in Colombia it is known from few localities and from specimens of the Andean region deposited in natural history collections ([von Sneider 1954](#); [Fitzpatrick and Willard 1982](#); [Hilty and Brown 2001](#); [Córdoba and Ahumada 2005](#); [Parra-Hernández et al. 2007](#); [Ayerbe-Quiñones et al. 2008](#); [Girão and Albano 2010](#); [Calderón-Leytón et al. 2011](#); [Penagos et al. 2018](#)).

Similarly, the black-and-white owl, *S. nigrolineata*, is distributed from southern México to northern Perú ([König et al. 2008](#)). Their diet includes rodents ([Ibañez et al. 1992](#); [Gerhardt et al. 1994](#)), amphibians, birds, and insects ([Ibañez et al. 1992](#); [Gerhardt et al. 1994](#); [Sandoval et al. 2008](#)). *Strix nigrolineata* is a widely distributed owl species, found in the west to the Andes, in an elevational range between 0 to 2,400 m ([Salaman and Stiles 2002](#); [Moreno-Bejarano and Álvarez-León 2003](#); [Strewe and Navarro 2003](#); [Ayerbe-Quiñones and López-Ordoñez 2011](#); [Acevedo-Charry et al. 2014](#); [López-O. et al. 2014](#); [Chaparro-Herrera et al. 2020](#)).

The efforts to document the diet of owls in Colombia, based on incidental observations (e.g., [Borrero 1967](#); [Riaño et al. 2017](#); [Padilla 2019](#); [Rodríguez-Villamil 2022](#)), and pellet analyses ([Delgado-V. and Cataño 2004](#); [Delgado-V. and Calderón-F. 2007](#); [Delgado-V. and Ramírez 2009](#); [Restrepo-Cardona et al. 2021](#)), are key to identify ecological interactions ([Chaparro-Herrera et al. 2015](#)). To contribute to the knowledge of the mammal's prey of owls in Colombia for future assessments of the role of these predator as biological controllers, we documented observations of mammals in the diet of *A. harrisii* and *S. nigrolineata* and performed a review of mammals predated by owls in wildlife.

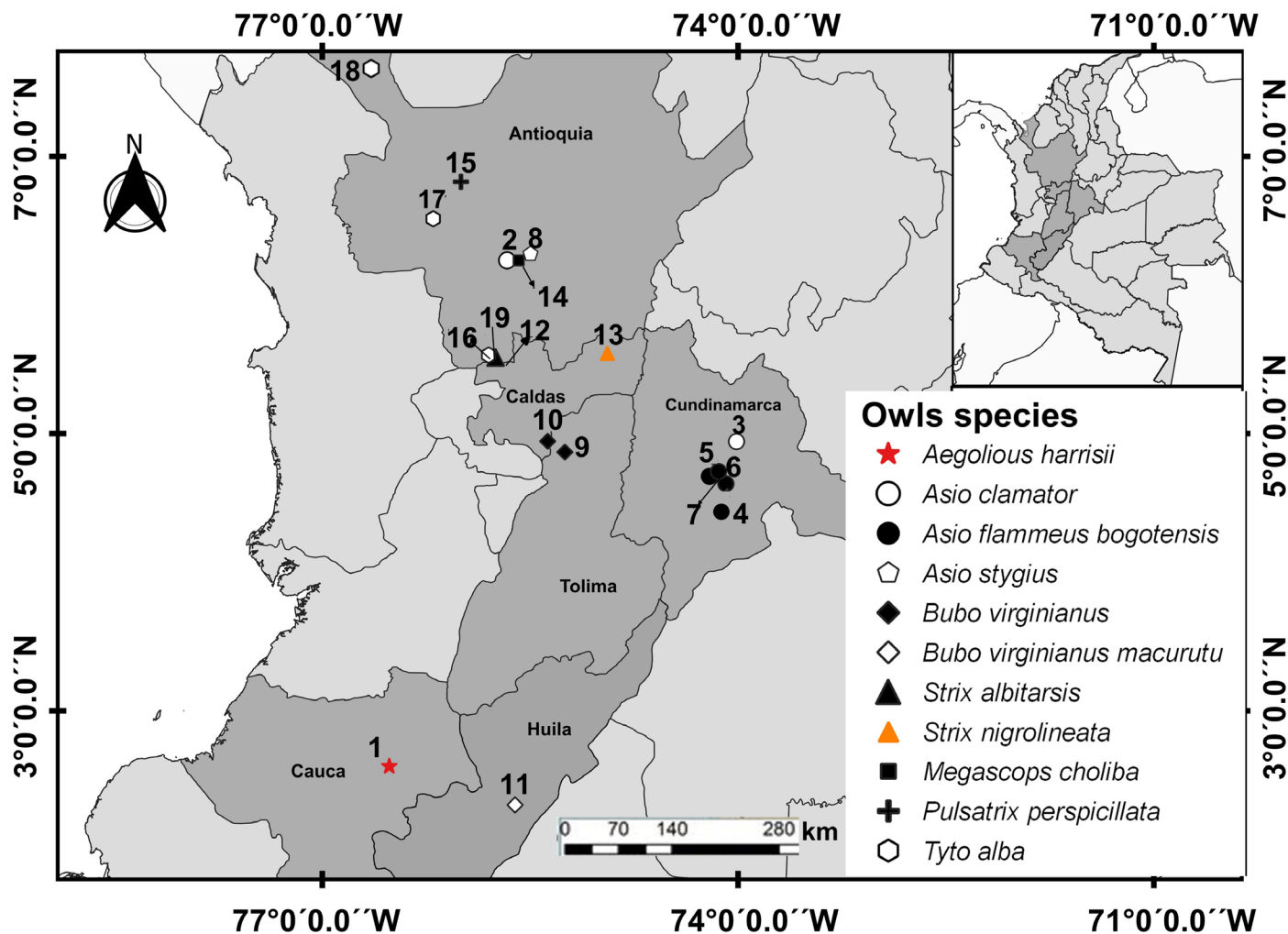
On August 22, 2010, at approximately 19:50 hr, we documented an attempt of predation of a bat by an owl, inside mixed crops of "caturre" coffee (*Coffea arabica*) and citrus trees, close to small remnants of oak forest (*Quercus humboldtii*), located in the Bella Vista farm (2° 36' 00" N, 76° 31'

01.2" W; 1,850 m; Figure 1), El Cairo, Municipality of Cajibío, Department of Cauca. The observation was obtained circumstantially during the monitoring of bats using mist nets in the study area. The owl was identified based on external traits ([Hilty and Brown 2001](#); [Ayerbe Quiñones 2018](#)). The bat specimen was identified using specialized keys ([Gardner 2008](#)), and deposited in the mammalian collection of the Universidad del Cauca (MHNUC). Additional data of mammal's prey of owls, came from the analysis of a single pellet regurgitated by an owl collected on November 8, 2020, in the area of influence of the Manso River in Corregimiento Berlín, Vereda La Reforma (5° 34' 49" N, 74° 56' 35" W; 843 m; Figure 1), Municipality of Samaná, Department of Caldas. The owl was observed standing in a tree in a dry forest ecosystem and was identified using external traits ([Hilty and Brown 2001](#); [Ayerbe Quiñones 2018](#)).

The collected pellet was examined at the Museo de Historia Natural of the Universidad de Caldas (MHN-UCa), Manizales, Colombia. The pellet was manually washed and disintegrated to finding bone fragments of mammals. To identify the fragments of teeth and other bones of mammals, specialized keys were used ([Gardner 2008](#)). Specimens were compared with those deposited at the MHN-UCa, and were deposited into it. To contrast our observational records with existing information regarding of the mammalian prey preferences of both owl species, a brief literature review was conducted. Simultaneously, we delved into the available body of knowledge concerning the mammal prey spectrum of owls in the wild, specifically within the Colombian context. For this, we searched for additional records cited in scientific articles in databases such as Web of Science, Science Direct, Scopus, and Google Scholar. We consider all the sections of the publications (Title, Keywords and Abstract), except in Google scholar, and all years. We used the combinations of Boolean operators in English and Spanish to identify studies [Colombia OR South America AND Owls OR Tytonidae OR Strigidae AND diet AND "Prey mammals"].

We captured an individual of *Aegolius harrisii* (Figure 2a) in a mist net installed inside mixed crops. The owl captured (Figure 2b) had 1 individual of the bat *Platyrrhinus dorsalis* on its left claws, so the bat was dead when the mist net was checked. The owl was photographed and released. The individual of *P. dorsalis* was prepared as skin and skull specimen (MHNUC OME 1097). External measurements of the individual, taken in the field were: total length: 65.56 mm, foot length: 12.48 mm, ear length: 17.05 mm, forearm length: 46.79 mm, and weight: 25 g. Other species of bats caught in the area included *Artibeus lituratus*, *Dermanura phaeotis*, *Sturnira giannae*, *Carollia brevicauda*, *C. perspicillata*, *Glossophaga soricina*, *Molossus molossus*, and *Histiotus humboldti*.

The pellet was regurgitated by an owl identified as *S. nigrolineata* by the presence of white and black stripes covering the neck, stomach, and chest. The analyses of the pellet showed the presence of unidentified invertebrates



**Figure 1.** Localities of the studies on mammals found in the diet of Colombian owls. New records and localities are highlighted with a red star (Cajibío, Cauca) and an orange triangle (Samaná, Caldas). The number of the localities are shown in Appendix 2.

and several bone fragments of the maxilla of 3 individuals of the shrew *Cryptotis* sp., and some teeth of bats of the genus *Dermanura* and the species *Rhogeessa io* (MHN-UCa-M 3425, MHN-UCa-M 3427, respectively).

The searching for mammals in the diet of *A. harrisii* yielded records of 8 species from 3 orders (Didelphimorphia, Chiroptera, and Rodentia), in 8 papers from Argentina (5), Brazil (1), Uruguay (1), and Paraguay (1; Table 1). The searching for mammals in the diet of *S. nigrolineata* in America yielded records of 16 species belonging to 2 orders (Chiroptera and Rodentia), in 5 articles from Guatemala (2), México (1), and Venezuela (2; Table 1). The mammals preyed on by other owls in Colombia, were at least 30 species, consumed by 8 owl species, belonged to 6 orders (Didelphimorphia, Paucituberculata, Eulipotyphla, Chiroptera, Rodentia, and Lagomorpha; Figure 2c), and reported in 12 publications. The American barn owl, *Tyto furcata* (but listed as *T. alba*) was the most studied owl with 4 publications and at least 23 mammal species documented in its diet (Appendix 1). The better represented order of mammals in the diet of owls in Colombia were Rodentia and Chiroptera.

Our record of an attempt of possible predation of a bat by *A. harrisii* in Colombia is the first documented for the species in the country. In addition, the record of the attempted predation on bats contributes to the knowledge of the trophic ecology of this species, for which prey has not been previously included on a national scale. Some attempts of predation of bats trapped in mist nets have been previously recorded for the species in Argentina, for *Sturnira erythromos*, whereas in Brazil, skulls of *S. lilium* have been recorded in pellet analysis (Lima and Castro 1994; Barrionuevo et al. 2008; Girão and Albano 2010), therefore, it can be considered that bats might be an important part of the diet of the Colombian owls. Our record also contributes to providing recent information on the distribution of the species of *A. harrisii*. In the Department of Cauca, *A. harrisii* has been historically reported in 3 localities on the eastern slope of the Western Cordillera (Municipality of El Tambo), the Popayán Plateau and the western flank of the Central-Eastern Cordilleras (Ayerbe-Quiñones et al. 2008).

For *S. nigrolineata*, our observations are also the first on the diet of this species in Colombia. However, bats have

**Table 1.** Mammals in the diet of *Aegolius harrisii* and *Strix nigrolineata* in the Neotropics. Data reported in scientific literature and this work.

<i>Aegolius harrisii</i>						
Taxon	Country	Type of record	Elevation (m)	Latitude	Longitude	References
Didelphimorphia						
<i>Thylamys sponsoria</i>	Argentina	Pellets	1,384	24° 45' 46" S	65° 22' 52" W	Rodríguez 2013
Chiroptera						
<i>Sturnira erythromos</i>	Argentina	Observation	650	28° 01' 59" S	65° 34' 59" W	Barrionuevo <i>et al.</i> 2008
<i>Sturnira liliium</i>	Brazil	Pellets	965	12° 35' 26" S	41° 42' 01" W	Lima and Castro 1994
<i>Platyrrhinus dorsalis</i>	Colombia	Observation	1,850	2° 36' 00" N	76° 31' 01" W	This work
Rodentia						
<i>Oligoryzomys</i> sp.	Argentina	Pellets	1,384	24° 45' 46" S	65° 22' 52" W	Rodríguez 2013
<i>Oligoryzomys nigripes</i>	Uruguay	Pellets	140	31° 41' 26" S	55° 51' 33" W	Barlow and Cuello 1964; Azpiroz <i>et al.</i> 2018
<i>Calomys</i> sp.	Argentina	Pellets	1,384	24° 45' 46" S	65° 22' 52" W	Rodríguez 2013
<i>Oryzomys fornesi</i>	Paraguay	-	178	24° 28' 20" S	55° 41' 40" W	Storer 1989
Unidentified	Argentina	Trail camera	550-600	26° 31' S	55° 00' W	Bodrati <i>et al.</i> 2019
<i>Strix nigrolineata</i>						
Eulipotyphla						
<i>Cryptotis</i> sp.	Colombia	Pellet	873	5° 34' 49" N	74° 56' 35" W	This study
Chiroptera						
<i>Saccopteryx bilineata</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Pteronotus davyi</i>	México	Stomach contents	210	17° 28' 50" N	89° 02' 43" W	Kuns <i>et al.</i> 1954
<i>Phyllostomus discolor</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Carollia perspicillata</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Artibeus</i> gr. <i>jamaicensis</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Artibeus</i> gr. <i>jamaicensis</i>	Guatemala	Pellets	250	17° 13' N	89° 37' W	Gerhardt <i>et al.</i> 1994
<i>Chiroderma villosum</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Dermanura</i> cf. <i>cinerea</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Dermanura</i> sp.	Colombia	Pellets	873	5° 34' 49" N	74° 56' 35" W	This study
<i>Uroderma</i> sp.	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Uroderma convexum</i>	Guatemala	Pellets	250	17° 13' N	89° 37' W	Gerhardt <i>et al.</i> 1994
<i>Lasiurus frantzi</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Lasiurus (Dasypterus) ega</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Rhogeessa io</i>	Colombia	Pellets	873	5° 34' 49" N	74° 56' 35" W	This study
<i>Eumops auripendulus</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Eumops glaucinus</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Molossus molossus</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Molossus pretiosus</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Molossus rufus</i>	Guatemala	Pellets	250	17° 13' N	89° 37' W	Gerhardt <i>et al.</i> 1994
Rodentia						
<i>Oligoryzomys fulvescens</i>	Guatemala	Pellets	250	17° 13' N	89° 37' W	Gerhardt <i>et al.</i> 1994
<i>Mus musculus</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992
<i>Rattus rattus</i>	Venezuela	Pellets	300	9° 04' N	69° 47' W	Ibañez <i>et al.</i> 1992

been extensively documented in the diet of this owl in other countries such as Guatemala and Venezuela (Kuns and Tashian 1954; Ibañez *et al.* 1992; Gerhardt *et al.* 1994). Besides that, we reported for the first time the shrews *Cryptotis* sp., as part of its diet and added records of *Dermanura* sp. and *Rhogeessa io*. Although we found no rodents in the diet of *S. nigrolineata*, 3 species (Table 1) have been registered in Venezuela (Ibañez *et al.* 1992) and Guatemala (Gerhardt *et al.* 1994).

Finally, the limited information on the diet of owls in Colombia limits our capability to explore patterns or tendencies in these ecological interactions. Nonetheless, it has been documented that habitat preferences are likely a key factor in the presence of mammal prey in pellet samples (Delgado-V. and Ramirez 2009). Considering that most of the owl diet reports in Colombia come from pellets collected in urban (abandoned houses or populated centers) or sub-urban areas of the country, several prey items



include exotic rodents (*Mus musculus*, *Rattus rattus*, and *R. norvegicus*) that are adapted to human-disturbed environments (Delgado-V. et al. 2005). The presence of exotic species in the owl's diet also shed light on their possible role as controller of zoonotic agent hosts. In other South American countries such as Chile, changes in human-disturbed landscapes, owls' prey on exotic and native species acting as potential controllers of zoonotic reservoirs (Muñoz-Pedros et al. 2016, 2018). Furthermore, the finding of opportunistic and exotic taxa that are favored by anthropic impact to the detriment of native species in the diet of native owls also provides an important input to assess biodiversity loss (Sax and Gaines 2003).

With our results, at least 32 mammal species are part of the diet of owls in Colombia, a number that seems underestimated considering that the country holds a high diversity of small mammals (Ramírez-Chaves et al. 2021). Our observations are the first records of mammal prey of *A. harrisii* and *S. nigrolineata* in Colombia. Of the 28 owl species reported in Colombia (Ayerbe Quiñones 2018; Chaparro-Herrera et al. 2021; Hilty 2021), 20 lack information about mammals as part of their diet. This confirms that the infor-

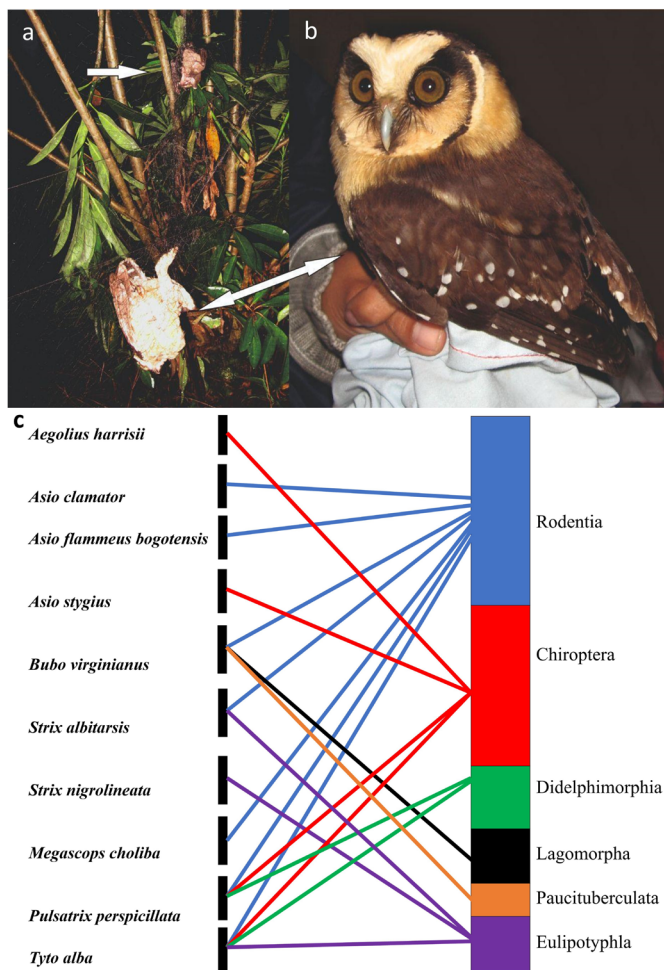
mation on the interactions between mammals and owl species in Colombia is still limited (Chaparro-Herrera et al. 2015; Restrepo-Cardona et al. 2019).

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**Figure 2.** Details of the attempted predation of bat *Platyrhinus dorsalis* by *Aegolius harrisii*. a) dead *Platyrhinus dorsalis* in the mist net (white arrow); b) captured individual of *A. harrisii*; c) summary of owl species of Colombia and the orders of mammals included in their diet.

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## Appendix 1

Mammals prey of owls (Strigiformes) in Colombia. Data was extracted from scientific review of literature and from this work. Localities (in parentheses) are shown in Appendix 2. Locality 10\*: *M. musculus* was obtained in the gizzard of one specimen (MHN-UCa-A 1170) of *Bubo virginianus nacuruto* found dead at Natural National Park Los Nevados, Villamaría, Caldas (4° 56' 42" N, 75° 22' 27" W, 3,027 m).

Owl Species	Order's prey	Species prey	References
<i>Aegolius harrisii</i>	Chiroptera	<i>Platyrrhinus dorsalis</i> (1)	This study
<i>Asio clamator</i>	Rodentia	<i>Mus musculus</i> (2); <i>Rattus rattus</i> (2); <i>R. norvegicus</i> (2); Sigmodontinae (2); <i>Cavia aperea</i> (3)	Delgado-V. et al. 2005; Riaño et al. 2017
<i>Asio flammeus bogotensis</i>	Rodentia	<i>M. musculus</i> (4); <i>Cryptotis thomasi</i> (4)	Camargo-Martínez and Rodríguez-Villamil 2019
		<i>M. musculus</i> (5); <i>Microrzomys</i> sp. (5); <i>Rattus</i> sp. (5); Unidentified (6)	Restrepo-Cardona et al. 2021; Rodríguez-Villamil 2022
		<i>R. rattus</i> (7); <i>R. norvegicus</i> (7), <i>Sigmodon hirsutus</i> (7)	Borrero 1962
<i>Asio stygius</i>	Chiroptera	<i>Artibeus lituratus</i> (8)	Borrero 1967
<i>Bubo virginianus</i>	Paucituberculata	<i>Caenolestes fuliginosus</i> (9)	This study; Restrepo-Cardona et al. 2019; Padilla 2019
	Rodentia	<i>M. musculus</i> (10*); Sigmodontinae (9); <i>Thomasomys</i> sp. (9) <i>S. hirsutus</i> (11)	
	Lagomorpha	<i>Sylvilagus</i> sp. (9)	
<i>Strix albitarsis</i>	Didelphimorphia	<i>Marmosa</i> sp. (12); <i>Marmosops</i> sp. (12)	Restrepo-Cardona et al. 2018
	Eulipotyphla	<i>Cryptotis</i> sp. (12)	
	Rodentia	<i>Reithrodontomys mexicanus</i> (12); <i>Thomasomys</i> sp. (12); <i>T. aureus</i> (12); Sigmodontinae (12)	
<i>Strix nigrolineata</i>	Eulipotyphla	<i>Cryptotis</i> sp. (13)	This study
	Chiroptera	<i>Dermanura</i> sp. (13); <i>Rhogeessa io</i> (13)	
<i>Megascops choliba</i>	Rodentia	<i>M. musculus</i> (14)	Delgado-V. 2007
<i>Pulsatrix perspicillata</i>	Didelphimorphia	<i>Didelphis</i> sp. (15); <i>Marmosa</i> sp. (15)	Restrepo-Cardona et al. 2018
	Chiroptera	<i>Artibeus lituratus</i> (15); <i>Phyllostomus discolor</i> (15); <i>P. hastatus</i> (15)	
	Rodentia	<i>Akodon affinis</i> (15); <i>R. norvegicus</i> (15); Sigmodontinae (15)	
<i>Tyto alba</i>	Didelphimorphia	<i>Marmosa</i> sp. (18, 19); <i>Marmosops</i> sp. (16)	Delgado-V. and Cataño-B. 2004; Delgado-V. and Calderón-F. 2007; Delgado-V. and Ramírez 2009; Restrepo-Cardona et al. 2018
	Eulipotyphla	<i>Cryptotis</i> sp. (16, 19)	
	Chiroptera	<i>Carollia</i> sp. (19); <i>Sturnira</i> sp. (16); Molossidae (18)	
	Rodentia	<i>A. affinis</i> (16, 19); <i>Handleyomys fuscatus</i> (19); <i>Heteromys australis</i> (16); <i>Melanomys caliginosus</i> (19); <i>Microrzomys</i> sp. (16); <i>M. musculus</i> (17); Muridae (18); <i>Nectomys</i> sp. (17); <i>Nephelomys cf. pectoralis</i> (16, 19); <i>Neusticomys</i> sp. (15); <i>Rattus</i> sp. (15, 18); <i>R. mexicanus</i> (15, 18); <i>Rhipidomys latimanus</i> (16); Sigmodontinae (15, 18); <i>Sigmodon</i> sp. (16); <i>S. hispidus</i> (16); <i>Oligoryzomys</i> sp. (16); <i>Zygodontomys brevicauda</i> (16)	



## Appendix 2

Localities of studies of mammals found in the diet of owls in Colombia, reported in scientific literature.

Owl species	Number	Locality	Elevation (m)	Latitude N	Longitude W
<i>Aegolious harrisii</i>	1	Cauca, Cajibío, El Cairo	1,850	2° 36' 00"	76° 31' 01.2"
<i>Asio clamator</i>	2	Antioquia, Medellín, Cerro at northwest of the city	1,670	6° 15'	75° 40'
<i>Asio clamator</i>	3	Cundinamarca, Cajicá, Universidad Militar Nueva Granada.	2,250	4° 56' 34"	74° 00' 43"
<i>Asio flammeus bogotensis</i>	4	Cundinamarca, Corinto, Cerro Redondo, Usme.	3,198	4° 26' 11"	74° 07' 15"
<i>A. f. bogotensis</i>	5	Cundinamarca, Mosquera, San Antonio	2,540	4° 41' 32"	74° 12' 26"
<i>A. f. bogotensis</i>	6	Cundinamarca, Bogotá, Ciudadela Universitaria UNAL	2,553	4° 38' 18"	74° 05' 18"
<i>A. f. bogotensis</i>	7	Cundinamarca, Bogotá, Engativá, Jaboque	2,544	4° 43' 36"	74° 8' 29"
<i>A. stygius</i>	8	Antioquia, Piedras Blancas, near Medellín	2,500	6° 17' 46"	75° 29' 54"
<i>Bubo virginianus</i>	9	Caldas, Murillo, Corazón Lake	4,020	4° 52'	75° 15'
<i>B. virginianus</i>	10	Caldas, Villamaría, Potosí, Brisas	4,070	4° 56' 42"	75° 22' 27"
<i>B. v. macurutu</i>	11	Huila, Gigante, 3.6 km south Río Loro	751	2° 19' 18"	75° 36' 34"
<i>Strix albitarsis</i>	12	Antioquia, Jardín, La Tebaida	2,430	5° 33'	75° 45'
<i>Strix nigrolineata</i>	13	Caldas, Norcasia, Berlín	873	5° 34' 49"	74° 56' 35"
<i>Megascops choliba</i>	14	Antioquia, Medellín, Street 48	1,469	6° 15'	75° 35'
<i>Pulsatrix perspicillata</i>	15	Antioquia, Ciudad Bolívar, urban area	1,183	6° 49'	76° 00'
<i>Tyto alba</i>	16	Antioquia, Jardín, urban area and El Clavel Nature Reserve	1,706	5° 34'	74° 48'
<i>T. alba</i>	17	Antioquia, Santa Rosa de Osos, La Clara, La Montañita	1,100	6° 33'	76° 12'
<i>T. alba</i>	18	Antioquia, Apartadó, Urabá	50	7° 52'	76° 37'
<i>T. alba</i>	19	Antioquia, Jardín, urban zone	1,760	5° 34'	75° 48'