

LISTS OF SPECIES

Non-volant mammals, Reserva San Sebastián-La Castellana, Valle de Aburrá, Antioquia, Colombia

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Abstract

From 2000 to 2006 I conducted mammalogical inventory in Reserva San Sebastián-La Castellana, Valle de Aburrá, Antioquia, Colombia. Twenty eight species of non-volant mammals are listed. List includes notable records such as threatened (*Leopardus tigrinus* and *Cabassous centralis*), cryptic and rare species (*Thomasomys popayanus*, *Cryptotis medellinia*, and *Olallamys albicauda*).

Introduction

Occasional published checklists have contributed to the understanding of the mammalian fauna and also reporting important new additions of species in Colombia (Cuervo et al. 1986; Rodríguez-Mahecha et al. 1995; Alberico et al. 2000), where most of these records are small mammals, such as bats (e.g. Cuartas-Calle and Muñoz 1999; Contreras and Cadena 2000), rodents (e.g. Alberico 1990, Voss et al. 2002), opossums (Polanco-O. et al. 1999), and insectivores (e.g. Woodman and Timm 1993; Woodman 2002; 2003). However there are still wide regions of Colombia that are almost unknown and poorly documented.

Antioquia is perhaps one of the less explored regions in terms of mammal inventories in Colombia. The currently known diversity of this region has been underestimated in both national (Alberico et al. 2000) and regional (Cuartas-Calle and Muñoz-Arango 2003) checklists, suggesting that local studies are necessary to understand local patterns of diversity. Valle de Aburrá (site where Medellín, capital of Antioquia, is situated) is one of the areas inside Antioquia needing urgent biological documentation due to current trends in deforestation and increased urbanization (Delgado-V 2007).

Although Valle de Aburrá (especially Santa Elena region) was explored by foreign naturalists in late nineteenth (see Sclater and Salvin 1879) and early twentieth (see Chapman 1917) centuries (with some new species described such as *Handleyomys intectus*, see Voss et al. 2002), recent efforts to

document the diversity of non-volant mammals have been minimal (see Delgado-V. 2007).

Despite the fact that original fauna and flora of the lower part of the Valle de Aburrá have been largely extirpated, there are some important patches of native montane forests in the highest parts, which are located mainly in the southeastern part of the region (see Cuervo and Delgado-V. 2001). One of the most interesting forests is Reserva San Sebastián-La Castellana, which offers a unique opportunity for studying the original fauna in the highest part of the Valle de Aburrá, near Medellín.

Materials and Methods

Reserva Ecológica San Sebastián-La Castellana (ca. 30 km SE Medellín city, 06°06' N, 75°33' W), municipality of El Retiro, Departamento Antioquia, Cordillera Central, at 2500-2800 m elevation, has an average temperature of 16.7 °C, relative humidity of 75.5 %, and annual rainfall of 2280 mm. A preliminary floral inventory documented disturbed primary forest as the principal cover in this zone (see Delgado-V. 2002); dominant tree species include *Quercus humboldtii* (Fagaceae), *Schefflera arborea* (Araliaceae), *Ilex laurina* (Aquifoliaceae), *Weimannia balbisiana* (Cunnoniaceae) and *Hyeronima antioquiensis* (Euphorbiaceae).

Interspersed with this vegetation are homogeneous patches supporting dense bamboo thickets of *Chusquea* sp. (Gramineae) and some exotic plantations of *Pinus patula* (Pinaceae).

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Species were recorded during sporadic fieldwork from 2000–2006 with several methods used in combination: **1.** captures with Sherman traps; **2.** captures with Tomahawk traps; **3.** direct observations during diurnal and nocturnal census; **4.** vocalizations; **5.** interviews with local naturalists; **6.** indirect signs such as tracks and scats; **7.** prey found in owl pellets or scats of crab-eating foxes *Cerdocyon thous* (Delgado-V. 2002); and **8.** carcasses found on roads surrounding the reserve (Delgado-V. 2007). Collections of small mammals and remains recovered of scats and owl pellets were deposited at CTUA (*Colección Teriológica, Universidad de Antioquia, Medellín*) or ICN (*Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá*).

Results and Discussion

Twenty eight species of non-volant mammals were recorded (Table 1). Notable records include:

1. Species not previously known to occur in Antioquia (see Cuartas-Calle and Muñoz-Arango 2003) (i.e. *Coendou rufescens*, *Neusticomys monticolus* [but see Voss 1988], *Thomasomys* sp.);

2. Species not previously recorded in other localities near San Sebastián-La Castellana (see Navarro et al. 2005) (i.e. *Marmosops* sp., *N. monticolus*, *C. rufescens*, *Olallamys albicauda* [see Delgado-V. and Zurc 2005], *Thomasomys* sp., and *Microryzomys minutus*);

3. Threatened species (i.e. *Leopardus tigrinus* (Rodríguez-Mahecha et al. 2006), *Cabassous centralis* (Alberico 2006) (see Delgado-V. 2007); and

4. Cryptic and rare species with poor information on their natural history (e.g. *Thomasomys popayanus*, *Cryptotis medellinia*, *O. albicauda*) (Woodman et al. 2003; Delgado-V. and Zurc 2005).

The taxonomic list obtained (Table 1) is product of the most complete inventory carried out near Medellín. It can be considered like a preliminary assessment of the diversity of non-volant mammals in Valle de Aburrá. Immediate studies are required in others forest patches surrounding Medellín since that Valle de Aburrá exhibits a growing level of deforestation and urbanization.

Table 1. Non-volant mammals recorded during surveys conducted from 2000 to 2006 in Reserva San Sebastián-La Castellana, Colombia. **Type of record** includes: **R**: roadkill (Delgado-V. 2007); **C**: captured; **OP**: species found in owl pellets; **IN**: interview; **V**: vocalization; **S**: species found in *Cerdocyon thous* scats (Delgado-V. 2002); **PH**: photographic material is available; **VR**: visual record; **IS**: indirect signs.

Taxon	Type of record
Didelphidae	
<i>Didelphis pernigra</i> J. A. Allen, 1900	R
<i>Didelphis marsupialis</i> Linnaeus, 1758	R, VR
<i>Marmosops</i> sp. Matschie, 1916	S
Caenolestidae	
<i>Caenolestes fuliginosus</i> (Tomes, 1863)	S
Megalonychidae	
<i>Choloepus hoffmanni</i> Peters, 1858	IN
Dasypodidae	
<i>Cabassous centralis</i> (Miller, 1899)	R, IN, IS
<i>Dasypus novemcinctus</i> Linnaeus, 1758	VR, IN, IS
Soricidae	
<i>Cryptotis medellinia</i> Thomas, 1912	R, S, C, PH
Canidae	
<i>Cerdocyon thous</i> (Linnaeus, 1766)	R, IN, V, IS

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Taxon	Type of record
Procyonidae	
<i>Potos flavus</i> (Schreber, 1774)	R, V
<i>Nasua nasua</i> (Linnaeus, 1766)	VR
<i>Nasuella olivacea</i> (Gray, 1865)	R, IS, PH
Mustelidae	
<i>Eira barbara</i> (Linnaeus, 1758)	IN
<i>Mustela frenata</i> Lichtenstein, 1831	R, IN
Felidae	
<i>Leopardus tigrinus</i> (Schreber, 1775)	R, IN
Sciuridae	
<i>Microsciurus</i> sp. J. A. Allen, 1895	R, VR, S
<i>Sciurus granatensis</i> Humboldt, 1811	R, V
Muridae	
<i>Microrhizomys minutus</i> (Tomes, 1860)	OP
<i>Neusticomys monticolus</i> Anthony, 1921	S
<i>Nephelomys</i> gr. <i>albigularis</i> (Tomes, 1860)	C, PH
<i>Reithrodontomys mexicanus</i> (Saussure, 1860)	C, PH, S
<i>Thomasomys popayanus</i> Allen, 1912	C, PH, S
<i>Thomasomys</i> sp. Coues, 1884	C, PH, S
Erethizontidae	
<i>Coendou rufescens</i> (Gray, 1865)	R
Dasyproctidae	
<i>Dasyprocta punctata</i> Gray, 1842	VR, IN, IS
Cuniculidae	
<i>Cuniculus taczanowskii</i> Stolzmann, 1865	IN, IS
Echimyidae	
<i>Olallamys albicauda</i> (Günther, 1879)	S
Leporidae	
<i>Sylvilagus brasiliensis</i> (Linnaeus, 1758)	R, IS

Acknowledgments

Idea Wild and The Explorers Club. For dedicated field assistance, I am very grateful to many friends. An anonymous referee provides important corrections on the manuscript.

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Received April 2008

Accepted October 2008

Published online January 2009