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Lists of Species

# Birds, Quindío Department, Central Andes of Colombia

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**Abstract:** We present an avifaunal list for the department of Quindío, Colombia. Data were compiled from our original fieldwork, museum online databases, and literature. The list includes 543 species, of which 34 are in some threatened category, 28 are Colombian endemics or semi-endemics, 44 are migrants, and 26 are new records for this region. Eleven species are represented only by museum vouchers from the first part of the 20th century and could be considered putatively extirpated in Quindío.

## Introduction

The Colombian avifauna, with around 1,870 species, is considered the richest in the world (Restall *et al*. 2006a), but species diversity is still unknown or poorly documented for several regions. Such is the case of the department of Quindío. The middle region of the Central Andes of Colombia has been known as Quindío (*e.g.* Quindiu, Quindío pass, Quindío trail, Quindío mountains) at least ever since the 1800s (Humboldt 1814; Meyer de Schauensee 1948; Holton 1981; Painter 1997). However, this region was part of Cauca and Caldas departments until 1966 when Quindío was established as an independent geopolitical department (Arango-Cano 1977).

Scientific exploration of Quindío began in the 19th century (*e.g.* Humboldt 1814). The early scientific expeditions focusing on documenting and collecting birds were carried out in Quindío's northeastern section by A. A. Allen and L. E. Miller in 1911 and later by K. von Sneidern in 1938 and 1942 (Chapman 1912; 1917; Meyer de Schauensee 1948; Paynter 1997). These collections yielded specimens that resulted in the descriptions of at least 13 new taxa (Chapman 1912; 1914b; 1923; 1925; Meyer de Schauensee 1951), some of which are Colombian Andean endemic species. Very few publications concerning the Quindío avifauna exist, with some of them dealing with taxonomic diagnosis, ecological issues, and range extensions (*e.g*. Chapman 1912; Renjifo 1999; Marín 2005; Duque 2005; Arbeláez-Cortés and Baena-Tovar 2006). Despite this, a bird checklist of the region still does not exist. Here we present a list of the bird species found in Quindío, based on our field observations and on public information.

## Materials and Methods

### *Study site*

Quindío is located on the western slope of the Colombian Central Andes between 75°52' W and 75°24' W, and between 4°04' N and 4°44' N (Figure 1), and is the smallest continental department of Colombia (196,183 ha). It is characterized by steep topography, including elevations from 950 m at Río La Vieja in Quimbaya and La Tebaida to 4,750 m at Paramillo del Quindío in Salento. The annual median temperature and precipitation vary locally from 5 to 24 °C and from 1,500 to 4,700 mm/year, respectively (Suarez and Cuadros unpublished data).

Despite the small area, Quindío contains five life zones according to Holdridge classification: humid premontane forest, very humid premontane forest, very humid low montane forest, pluvial montane forest and pluvial páramo (CRQ and IAvH 2003). Major landscape matrix types are primary and secondary forests, pastures and crops (*e.g.* Renjifo 2001) (Figure 2). Sixty-seven percent of Quindío is covered by agricultural plantations, mainly coffee, and livestock pasture. About 27% is native forest, with some areas dominated by patches of bamboo (*Guadua angustifolia*) and 3% is planted exotic forest. The remaining 3% of the Quindío's area is covered by urban areas (CRQ and IAvH 2003). The Quindío native forests are highly fragmented (Renjifo 2001), and only a section of 1,714 ha is protected in a national park (Parque Nacional Natural Los Nevados). Other natural reserves encompass between 15 and 6,800 ha (CRQ and IAvH 2003).

### *Data collection*

We gathered information from three main sources. First, we compiled the information of our field observations carried out between 1986 and 2010. Second, we consulted a database of ornithological collections available in BioMap project / Darwin DataBase (2003). Third, we reviewed the published literature (Chapman 1912; 1914a, b; 1915; 1917; 1921; 1923; 1925; Renjifo 1991; 1994; 1999; 2001; Duque 2005; Marín 2005; Rivera-Pedroza and Ramírez 2005; Arbeláez-Cortés and Baena-Tovar 2006; Arbeláez-Cortés 2007; Marín-Gómez 2007; 2009; Arbeláez-Cortés

*et al.* 2011). We also consulted books about Colombian and South American avifauna to verify the citing of Quindío's localities, or that the species range information or maps clearly include the zone of the western slope of Central Andes or the Middle Cauca valley (Meyer de Schauensee 1948; 1949; 1950; 1951; Hilty and Brown 1986; Isler and Isler 1987; Ridgely and Tudor 1989; Fjeldså and Krabbe 1990; Ridgely and Tudor 1994; Renjifo *et al*. 2002; Restall *et al*. 2006a, b).

Our field observations have been mainly *ad libitum*, with some particular cases in which systematic observations were conducted (*e.g.* Marín-Gómez 2007; Renjifo 1999; 2001). On some occasions, we used mist-nets and sound recorders to assess and document avian occurrence. These observations have been part of different projects conducted by us. In the majority of cases each of us obtained observations independently during different years. During our fieldwork we explored several localities (around 110, Figure 1). We detail information for 24 localities studied more than 50 hours (Table 1).

We did not personally verify museum specimen identifications for this study because 1) our field data included almost all the species that were represented by collection vouchers (see Results and Discussion), 2) these vouchers have been examined in other studies (Chapman 1912; 1914a, b; 1915; 1921; 1923; 1925; Meyer de Schauensee 1948; 1949; 1950; 1951; Renjifo 1999; Renjifo *et al*. 2002), and 3) the majority of vouchers are housed in collections with high curatorial standards, suggesting that their information is reliable.

We underscore that the major ornithological collections

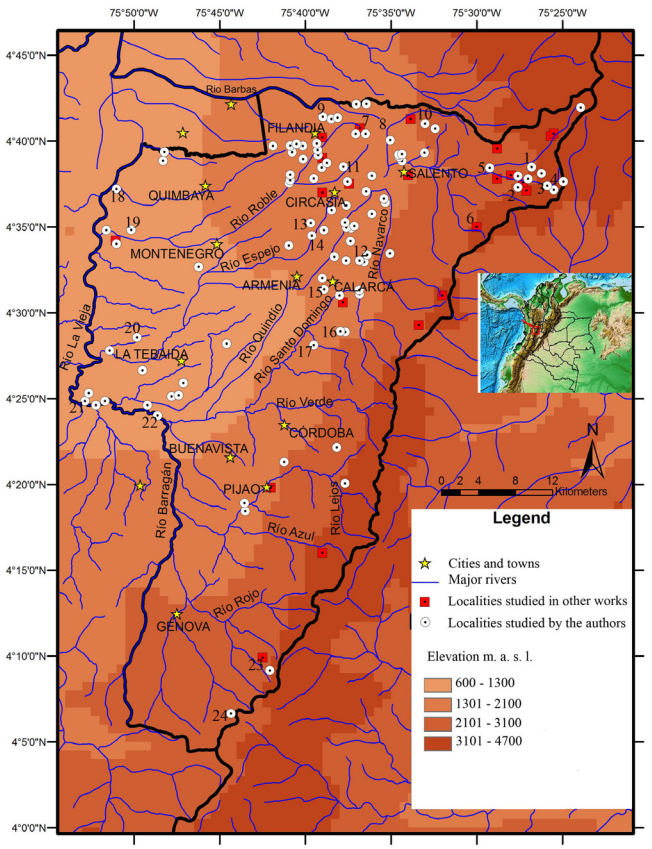


**Figure 1.** Map of Quindío department. Inset shows the location of Quindío in Colombia. The numbers indicate representative localities were intensive field work has been conducted. These numbers correspond to the numbering scheme outlined in Table 1.

in the region were conducted before Quindío was considered as an independent geopolitical department (see Introduction). To assure that the records were indeed within the current Quindío boundaries we checked the historical localities for outside sources. Consequently, we excluded localities such as El Eden and Santa Isabel which turned out to be at present in the departments of Tolima and Risaralda, respectively (Chapman 1912; Painter 1997).

Taxonomy and nomenclature follows the classification of the South American Checklist Committee (Remsen *et al*. 2010). Endemicity was assigned following Stiles (1998), Ridgely and Greenfield (2001), and Cuervo *et al*. (2005). For the conservation status we followed Renjifo *et al*. (2002) and BirdLife International (2009). Unreferenced records are of our observations and therefore represent new records.

## Results and Discussion

Based on our compilation, there are 543 bird species, belonging to 59 families, in the department of Quindío, Colombia (Table 2). Of these, 34 are classified in some IUCN threatened category, for example: *Hapalopsittaca fuertesi* (Chapman, 1912) (Figure 3A), *Andigena hypoglauca* (Gould, 1833) (Figure 3B), *Andigena nigrirostris* (Waterhouse, 1839) (Figure 3C), and *Dacnis hartlaubi* (Sclater, 1855) (Figure 4E). Twenty-eight species are Colombian endemics or semi-endemics, such as: *Picumnus granadensis* (Lafresnaye, 1847) (Figure 4A), *Cercomacra parkeri* (Graves, 1997) (Figure 4B), and *Xenopipo flavicapilla* (Sclater, 1852) (Figure 4C); and 44 are Neartic-Neotropical migrants. Around 90% of the species were represented by two or more records in our dataset. We also have additional support material, such as audio recordings or photos, for around 60% of the species. Particular references to the evidence for each species are further detailed in Table 2 and additional information could be provided upon request from the authors. Some noteworthy species are shown in Figure 3 and Figure 4.

There was considerable variation in the contribution of the three sources of information to the checklist. Our field observations included 532 species (98% of the total), the literature review accounted 446 species (82%), and around 278 species (51%) were represented in museums by 1 to 69 specimens per species. We ruled out three single museum specimens of *Malacoptila panamensis* (Lafresnaye, 1847), *Lophornis delattrei* (Lesson, 1839), and *Sporophila americana* (Gmelin, 1789), which could be misidentifications or errors in geographic assignment, since they would represent a deep contradiction with other information about Colombian Central Andes avifauna (Hilty and Brown 1986). It is also necessary to note that the museum databases available through the Biomap Project / Darwin Database (2003) did not include information for *Ognorhynchus icterotis* (Massena and Souancé, 1854) and *Tigrisoma fasciatum* (Such, 1825), in Quindío, but LMR revised vouchers of both species, from El Roble and Salento localities, at the AMNH (Renjifo 1999).

Our list includes 26 new records (Table 3), two of which could correspond to vagrant individuals: *Aythya affinis* (Eyton, 1838) and *Bartramia longicauda* (Bechstein, 1812). Twelve new records are for lowland species that occur in northern Colombia, Upper Cauca Valley or

Magdalena Valley, but that have not been reported in the Middle Cauca Valley in Quindío: *Pseudoscops clamator* (Vieillot, 1815), *Gampsonyx swainsonii* (Vigors, 1825), *Laterallus albigularis* (Lawrence, 1861), *Eutoxeres aquila* (Bourcier, 1847), *Contopus cinereus* (Spix, 1825), *Colonia colonus* (Vieillot, 1818), *Machaeropterus regulus* (Hahn, 1819), *Turdus grayi* (Bonaparte, 1838), *Tiaris obscurus* (d'Orbigny and Lafresnaye, 1837), *Oryzoborus angolensis* (Linnaeus, 1766), *Eucometis penicillata* (Spix, 1825), and *Cacicus cela* (Linnaeus, 1758). Nine new records are for mountain species reported for the eastern slope of the Central Andes: *Accipiter collaris* (Sclater, 1860), *Uropsalis lyra* (Gmelin, 1789), and *Anthocephala floriceps* (Gould, 1854); or in some points along this mountain range: *Megascops colombianus* (Traylor, 1952), *Phalcoboenus carunculatus* (Des Murs, 1853), *Geotrygon linearis* (Prévost, 1843), *Nyctibius maculosus* (Ridgway 1912), *Lurocalis semitorquatus* (Gmelin, 1789), and *Cyphorhinus thoracicus* (Tschudi, 1844). Detailed information on the recent observation of *Grallaricula cuculata* (Sclater, 1856)

**Table 1.** Representative localities in Quindío department with more than 50 h of field ornithological work, with information on location of sites and habitat used by species. The number before the name of each locality corresponds to the numbering in Figure 1. Source details publications and the time of observation by the authors (a.o.). Abbreviations: N.R. (Natural Reserve).

| NUMBER | LOCALITY, MUNICIPALITY | COORDINATES | ELEVATION (M) | HABITAT | SOURCE |
|---|---|---|---|---|---|
| 1 | Alto Quindío, Salento | 4°38'27'' N, 75°26'49'' W | 2500-3600 | Montane forest and páramo | a.o. 500-600 h |
| 2 | Acaime N.R., Salento | 4°37'33'' N, 75°27'18'' W | 2700-3100 | Montane forest | a.o. 1700-2000 h |
| 3 | Estrella de Agua, Salento | 4°37'23'' N, 75°25'52'' W | 3100-3700 | Montane forest | Arbeláez-Cortés *et al.* (2011); a.o. 200-300 h |
| 4 | Páramo de Frontino, Salento | 4°37'9'' N, 75°25'30'' W | 3400 | Elfin forest and páramo | Arbeláez-Cortés *et al.* (2011); Arbeláez-Cortés and Baena-Tovar (2006); a.o. 50-100 h |
| 5 | Valle de Cocora, Salento | 4°38'27'' N, 75°29'13'' W | 2700 | Montane forest and agroecosystems | a.o. 100-200 h |
| 6 | Laguneta, Salento | 4°34'59'' N, 75°30'0'' W | 3000 | Montane forest | Chapman (1917) |
| 7 | Río Roble, Circasia | 4°40'44'' N, 75°36'50'' W | 1500-2000 | Pre-montane forest | a.o. 200-300 h |
| 8 | Bremen N.R., Filandia - Circasia | 4°40'26'' N, 75°37'5'' W | 1500-2100 | Pre-montane forest | Renjifo (1999); 2001; Marín-Gómez (2009); a.o. 600-700 h |
| 9 | Río Barbas, Filandia | 4°41'24'' N, 75°38'56'' W | 1500-2100 | Pre-montane forest | Renjifo (1999); 2001; Marín-Gómez (2009); a.o. 600-700 h |
| 10 | La Patasola N.R., Salento | 4°40'59'' N, 75°33'0'' W | 2600 | Montane forest | Arbeláez-Cortés (2007); a.o. 400-500 h |
| 11 | Bosque el Silencio, Circasia | 4°38'30'' N, 75°37'44'' W | 1700 | Pre-montane forest | a.o. 100-200 h |
| 12 | Quebrada la Coca, Calarcá | 4°35'56'' N, 75°39'00'' W | 1500 | Pre-montane forest and agroecosystems | a.o. 50-100 h |
| 13 | Finca La Ofrenda, Circasia | 4°35'13'' N, 75°39'40'' W | 1500 | Agroecosistems | a.o. 50-100 h |
| 14 | Cedro Rosado, Armenia | 4°32'38'' N, 75°46'12'' W | 1500 | Pre-montane forest | Marín-Gómez (2005); a.o. 400-500 h |
| 15 | Río Santo Domingo, Calarcá | 4°31'23'' N, 75°38'53'' W | 1600 | Pre-montane forest and agroecosystems | a.o. 200-300 h |
| 16 | Peñas Blancas, Calarcá | 4°28'55'' N, 75°37'59'' W | 2000-2500 | Pre-montane forest and agroecosystems | a.o. 100-200 h |
| 17 | Lago Las Vegas, Armenia | 4°28'8'' N, 75°39'29'' W | 1200 | Marshes | a.o. 100-200 h |
| 18 | Puerto Alejandría, Quimbaya | 4°37'12'' N, 75°51'0'' W | 950 | Riparian forest and agroecosystems | Duque (2005); a.o. 200-300 h |
| 19 | El Ocaso N.R., Quimbaya. | 4°34'1'' N, 75°51'0'' W | 1050 | Pre-montane forest and agroecosistems | Marín-Gómez (2007); a.o. 400-500 h |
| 20 | San Pablo, Quimbaya | 4°28''34'' N, 75°49'48'' W | 1000 | Riparian forest and agroecosystems | Duque (2005); a.o. 200-300 h |
| 21 | Finca La Balsora, La Tebaida | 4°24'50'' N, 75°52'52'' W | 1050 | Riparian forest and agroecosystems | a.o. 100-200 h |
| 22 | Maravelez, La Tebaida | 4°24'0'' N, 75°48'36'' W | 1100 | Riparian forest and agroecosystems | Duque (2005); a.o. 200-300 h |
| 23 | Vereda Pedregales, Génova | 4º9'9.2'' N, 75º42'57'' W | 2700-3900 | Montane forest an páramo | a.o. 50-100 h |
| 24 | Río San Juan, Génova | 4°6'40'' N, 75°44'20'' W | 3600 | Montane forest an páramo | a.o. 50-100 h |

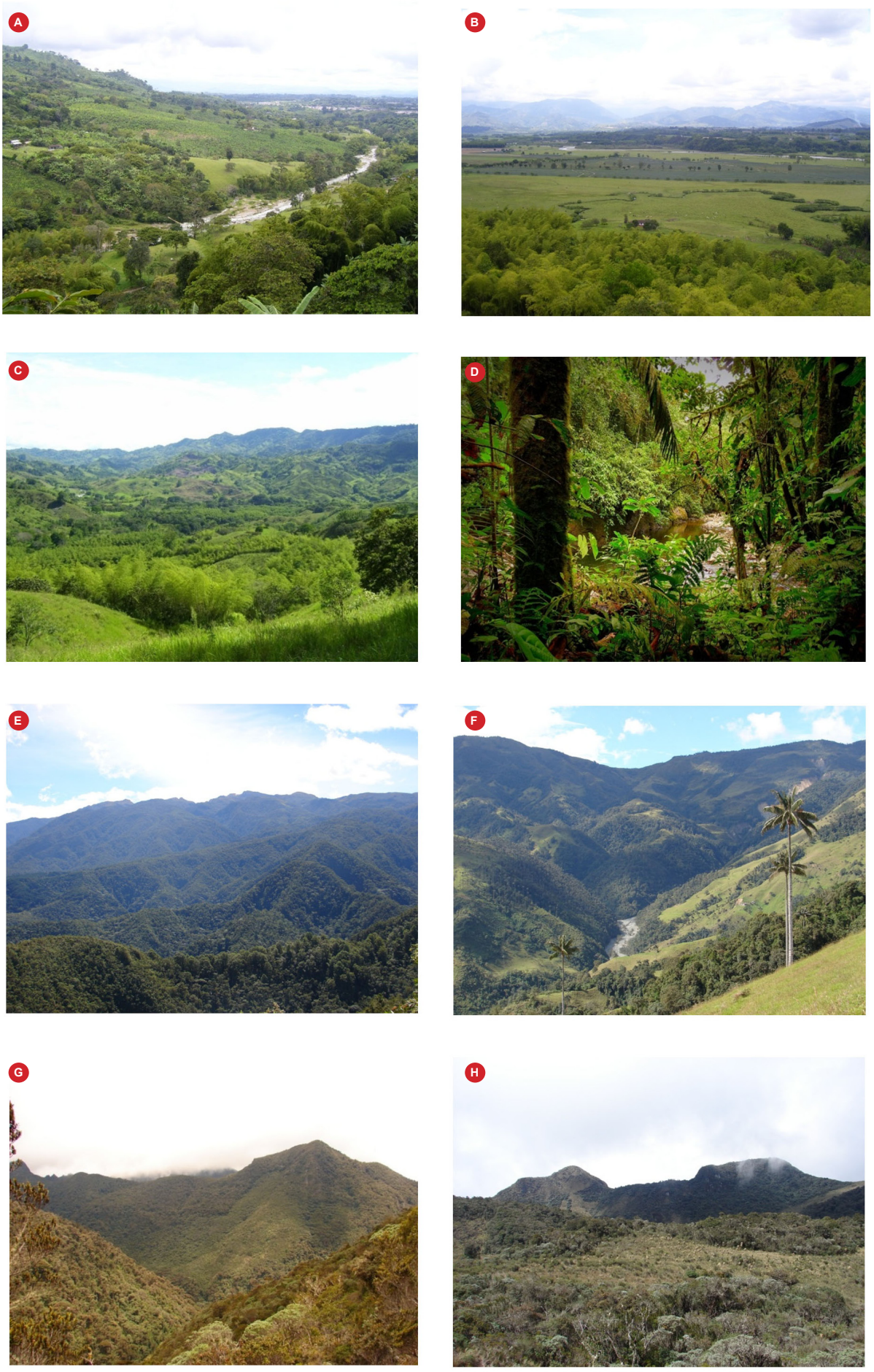


**Figure 2.** Photos of some Quindío landscapes and habitats. A, Typical landscape in Quindío around Río Santo Domingo, Calarcá; B, Río la Vieja, Quimbaya; C, El Ocaso Natural Reserve, Quimbaya; D, Río Barbas, Filandia; E, La Patasola Natural Reserve, Salento; F, Río Lejos Valley, Pijao; G, Above Estrella de Agua, Alto Quindío, Salento; H, Páramo de Romerales, Alto Quindío, Salento. Photos A-C by OHMG, Photos D-H by EAC

is forthcoming (Marín-Gómez *et al*. unpublished data). The remaining two new records are for species with scattered records in Colombia: *Campylopterus falcatus* (Swainson, 1821) and *Pachyramphus albogriseus* (Sclater, 1857).

We considered observations of four species very likely attributed to escaped or released captive birds (D. Duque and P. J. Cardona personal observations). These species are *Buteo nitidus* (Latham, 1790), *Spizaetus ornatus* (Daudin, 1800), *Aratinga pertinax* (Linnaeus, 1758) and *Icterus nigrogularis* (Hahn, 1819). Additionally, the *Vultur gryphus* (Linnaeus, 1758) that inhabits Los Nevados National Park are individuals from reintroduction programs conducted around 1990. The last confirmed record of non-introduced *V. gryphus* in this part of the Andes is from 1967 (O. Ospina-Herrera, personal communication). Finally, two exotic species, have established themselves in Quindio, *Columba livia* (Gmelin, 1789) and *Lonchura malacca* (Linnaeus, 1766); the latter recently observed.

Eleven species were represented only by vouchers of collections from the first half of the 20th century. These species are: *Tigrisoma lineatum* (Boddaert, 1783), *Tigrisoma fasciatum, Ognorhynchus icterotis*, *Asio stygius* (Wagler, 1832), *Ampelion rufaxilla* (Tschudi, 1844), *Xenops minutus* (Sparrman, 1788), *Elaenia pallantangae* (Sclater, 1861), *Psarocolius angustifrons* (Spix, 1824), *Psarocolius decumanus* (Pallas, 1769), *Hypopyrrhus pyrohypogaster* (de Tarragon, 1847) and *Cacicus uropygialis* (Lafresnaye, 1843). We consider these species as putatively extirpated in Quindío, based on the criteria that there has not been a record for more than 50 years. This time frame seems sufficient for the indication of extinction based on studies in fragmented tropical forests (Brooks *et al*. 1999). In addition, the majority of these species are found mainly below 2,500 m (Hilty and Brown 1986; Ridgeley and Tudor 1989; 1994), an elevation belt that has been heavily modified in Quindío and where only some isolated forest fragments remain (Renjifo 1999; 2001). However, we recognize that ascertaining whether a species is extirpated is complicated (Diamond 1987). In the literature (Hilty and Brown 1986; Renjifo *et al*. 2002) we also found information for other species that apparently formerly inhabited Quindío: *Cairina moschata* (Linnaeus, 1758), *Platalea ajaja* (Linnaeus, 1758) and *Crax alberti* (Fraser, 1852). However, these species were not included in the list because there are no unequivocal data, such as museum vouchers, to confirm their historical occurrence in Quindío.

Although Quindío encompasses only 0.2% of the Colombian territory its bird species richness is nearly 30% of the country's total, making the area an extraordinary hotspot of bird diversity. The documentation of at least eleven species as putatively extirpated in this department in less than 100 years is likely a result of the influence of anthropogenic activities (see Renjifo 1999). This is disconcerting for those species that are endemic to the Colombian Central Andes, such as: *Bolborhynchus ferrugineifrons* (Lawrence, 1880), *Hapalopsittaca fuertesi*, and *Grallaria milleri* (Chapman, 1912). Undoubtedly, additional inventories will add species to the Quindío list. For example, southern Quindío is poorly known, especially in the area of Buenavista, Pijao (*e.g.* around Río Azul) and Genova (*e.g.* around Río San Juan, Río Gris and Río Rojo). Also, some localities in the mountains of the north, such as Laguna La Cubierta, the vicinities of Haciendas Portugal, El Escobal, and Alaska in Salento, need to be further explored.

**Table 2.** Bird species recorded within Quindío department, Colombia. New records are indicated by "NwR". Conservation status can be: Vulnerable (VU), Near Threatened (NT), Endangered (EN) and Critically Endangered (CR). Species putatively extirped from the department are indicated by "Ext". Endemism status is summarized as follows: Colombian endemic (*) and Colombian semi-endemic (**). Neartic-Neotropical migrants are indicated by "M". Species that have specimens in museums are indicated by "C".

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| **TINAMIDAE** | | |
| *Nothocercus julius* (Bonaparte, 1854) | | 1,13,14 |
| *Crypturellus soui* (Hermann, 1783) | | 1,14 |
| **ANATIDAE** | | |
| *Dendrocygna autumnalis* (Linnaeus, 1758) | | 1,11 |
| *Merganetta armata* (Gould, 1842) | C | 1,3,11,15 |
| *Anas andium* (Sclater and Salvin, 1873) | | 1 |
| *Anas discors* (Linnaeus, 1766) | M | 1,11 |
| *Aythya affinis* (Eyton, 1838) | NwR,M | 1,15 |
| *Nomonyx dominicus* (Linnaeus, 1766) | | 1 |
| **CRACIDAE** | | |
| *Chamaepetes goudotii* (Lesson, 1828) | C | 1,2,3,7,8,12,13,14,15 |
| *Penelope montagnii* (Bonaparte, 1856) | | 1,12,14,15 |
| *Penelope perspicax* (Bangs, 1911) | EN,*,C | 1,3,8,13,14,15 |
| *Aburria aburri* (Lesson, 1828) | NT | 1,8,14 |
| *Ortalis motmot* (Linnaeus, 1766) | | 1 |
| **ODONTOPHORIDAE** | | |
| *Colinus cristatus* (Linnaeus, 1766) | | 1 |
| *Odontophorus hyperythrus* (Gould, 1858) | NT,*,C | 1,2,3,7,14 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| **PODICIPEDIDAE** | | |
| *Tachybaptus dominicus* (Linnaeus, 1766) | | 1 |
| *Podilymbus podiceps* (Linnaeus, 1758) | | 1,15 |
| **PHALACROCORACIDAE** | | |
| *Phalacrocorax brasilianus* (Gmelin, 1789) | | 1,11 |
| **ANHINGIDAE** | | |
| *Anhinga anhinga* (Linnaeus, 1766) | | 1 |
| **ARDEIDAE** | | |
| *Tigrisoma lineatum* (Boddaert, 1783) | Ext,C | 3 |
| *Tigrisoma fasciatum* (Such, 1825) | Ext, C | 3 |
| *Nycticorax nycticorax* (Linnaeus, 1758) | | 1,11 |
| *Butorides striata* (Linnaeus, 1758) | | 1,11 |
| *Ardea cocoi* (Linnaeus, 1766) | | 1,11 |
| *Ardea alba* (Linnaeus, 1758) | | 1,11 |
| *Ardea herodias* (Linnaeus, 1758) | | 1 |
| *Egretta thula* (Molina, 1782) | M | 1,11,15 |
| *Bubulcus ibis* (Linnaeus, 1758) | | 1,11,15 |
| *Egretta caerulea* (Linnaeus, 1758) | | 1,11 |
| **THRESKIORNITHIDAE** | | |
| *Phimosus infuscatus* (Lichtenstein, 1823) | | 1,8,11,15 |
| *Theristicus caudatus* (Boddaert, 1783) | | 1,11,15 |
| **CATHARTIDAE** | | |
| *Cathartes aura* (Linnaeus, 1758) | | 1,8,9,15 |
| *Coragyps atratus* (Bechstein, 1793) | | 1,8,9,15 |
| *Vultur gryphus* (Linnaeus, 1758) | EN | 1 |
| **PANDIONIDAE** | | |
| *Pandion haliaetus* (Linnaeus, 1758) | M | 1,11 |
| **ACCIPITRIDAE** | | |
| *Elanus leucurus* (Vieillot, 1818) | | 1,9,15 |
| *Gampsonyx swainsonii* (Vigors, 1825) | NwR | 1 |
| *Chondrohierax uncinatus* (Temminck, 1822) | C | 1,2,8,15 |
| *Elanoides forficatus* (Linnaeus, 1758) | C | 1,2,3 |
| *Rostrhamus sociabilis* (Vieillot, 1817) | | 1 |
| *Ictinia plumbea* (Gmelin, 1788) | | 1 |
| *Accipiter collaris* (Sclater, 1860) | NwR,NT | 1 |
| *Accipiter striatus* (Vieillot, 1808) | | 1,8,12,15 |
| *Accipiter bicolor* (Vieillot, 1817) | | 1 |
| *Geranoaetus melanoleucus* (Vieillot, 1819) | C | 1,5,12 |
| *Buteo magnirostris* (Gmelin, 1788) | C | 1,2,3,8,9,13,14,15 |
| *Buteo platypterus* (Vieillot, 1823) | M,C | 1,2,3,8,9,14,15 |
| *Buteo leucorrhous* (Quoy and Gaimard, 1824) | | 1 |
| *Buteo nitidus* (Latham, 1790) | | 1 |
| *Buteo brachyurus* (Vieillot, 1816) | | 1,14 |
| *Buteo swainsoni* (Bonaparte, 1838) | M | 1,8 |
| *Buteo albicaudatus* (Vieillot, 1816) | | 1 |
| *Buteo polyosoma* (Quoy and Gaimard, 1824) | | 1,12 |
| *Spizaetus ornatus* (Daudin, 1800) | | 1 |
| *Spizaetus isidori* (Des Murs, 1845) | EN | 1,14 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| **FALCONIDAE** | | |
| *Herpetotheres cachinnans* (Linnaeus, 1758) | | 1,14,15 |
| *Micrastur ruficollis* (Vieillot, 1817) | C | 1,3 |
| *Micrastur semitorquatus* (Vieillot, 1817) | | 1,14 |
| *Caracara cheriway* (Jacquin, 1784) | | 1,8,15 |
| *Phalcoboenus carunculatus* (Des Murs, 1853) | NwR | 1,15 |
| *Milvago chimachima* (Vieillot, 1816) | C | 1,2,15 |
| *Falco sparverius* (Linnaeus, 1758) | C | 1,2,3,9,15 |
| *Falco columbarius* (Linnaeus, 1758) | M | 1 |
| *Falco rufigularis* (Daudin, 1800) | | 1,9 |
| *Falco femoralis* (Temminck, 1822) | | 1,15 |
| *Falco peregrinus* (Tunstall, 1771) | | 1 |
| **RALLIDAE** | | |
| *Aramides cajanea* (Statius Müller, 1776) | | 1,15 |
| *Laterallus albigularis* (Lawrence, 1861) | NwR | 1 |
| *Pardirallus nigricans* (Vieillot, 1819) | | 1 |
| *Gallinula chloropus* (Linnaeus, 1758) | | 1,11 |
| *Porphyrio martinica* (Linnaeus, 1766) | | 1,11 |
| **CHARADRIIDAE** | | |
| *Vanellus chilensis* (Molina, 1782) | C | 1,2,3,7,9,11,14,15 |
| *Vanellus resplendens* (Tschudi, 1843) | | 1,12 |
| *Charadrius collaris* (Vieillot, 1818) | | 1,11 |
| **RECURVIROSTRIDAE** | | |
| *Himantopus mexicanus (*Statius Müller, 1776) | | 1,11 |
| **SCOLOPACIDAE** | | |
| *Gallinago nobilis* (Sclater, 1856) | C | 1,2,12 |
| *Bartramia longicauda* (Bechstein, 1812) | NwR,M | 1 |
| *Actitis macularius* (Linnaeus, 1766) | M,C | 1,3,9,11,15 |
| *Tringa melanoleuca* (Gmelin, 1789) | M | 1,15 |
| *Tringa flavipes* (Gmelin, 1789) | M | 1 |
| *Tringa solitaria* (Wilson, 1813) | M | 1,11,15 |
| **JACANIDAE** | | |
| *Jacana jacana* (Linnaeus, 1766) | | 1,11,15 |
| **LARIDAE** | | |
| *Sternula superciliaris* (Vieillot, 1819) | | 1,11 |
| **COLUMBIDAE** | | |
| *Columbina talpacoti* (Temminck, 1811) | | 1,9,14,15 |
| *Claravis pretiosa* (Ferrari-Pérez, 1886) | | 1,15 |
| *Patagioenas fasciata* (Say, 1823) | C | 1,2,3,6,8,12,13,14,15 |
| *Patagioenas cayennensis* (Bonnaterre, 1792) | | 1,8,9,14 |
| *Patagioenas subvinacea* (Lawrence, 1868) | C | 1,3,6,7,14,15 |
| *Zenaida auriculata* (Des Murs, 1847) | C | 1,3,8,9,14 |
| *Leptotila verreauxi* (Bonaparte, 1855) | C | 1,2,3,8,9,13,14 |
| *Leptotila plumbeiceps* (Sclater and Salvin, 1868) | | 1,8 |
| *Geotrygon linearis* (Prévost, 1843) | NwR | 1 |
| *Geotrygon frenata* (Tschudi, 1843) | C | 1,2,3,7,8,14 |
| **PSITTACIDAE** | | |
| *Ara severus* (Linnaeus, 1758) | C | 1,3,7 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Ognorhynchus icterotis* (Massena and Souancé, 1854) | CR,Ext,**,C | 3 |
| *Leptosittaca branickii* (Berlepsch and Stolzmann, 1894) | VU,C | 1,2,13,14,15 |
| *Aratinga wagleri* (Gray, 1845) | | 1,8,9,14,15 |
| *Aratinga pertinax* (Linnaeus, 1758) | | 1,14 |
| *Forpus conspicillatus* (Lafresnaye, 1848) | | 1,8,9,14,15 |
| *Brotogeris jugularis* (Statius Müller, 1776) | | 1,9,14 |
| *Bolborhynchus lineola* (Cassin, 1853) | | 1,8 |
| *Bolborhynchus ferrugineifrons* (Lawrence, 1880) | VU,* | 1,12,14 |
| *Hapalopsittaca amazonina* (Des Murs, 1845) | VU,C | 1,3,14 |
| *Hapalopsittaca fuertesi* (Chapman, 1912) | CR,*,C | 1,3,13,14 |
| *Pionus menstruus* (Linnaeus, 1766) | | 1,9,14,15 |
| *Pionus tumultuosus* (Tschudi, 1844) | C | 1,2,3,4,8,13,14,15 |
| *Pionus chalcopterus* (Fraser, 1841) | C | 1,2,3,8,9,13,14,15 |
| *Amazona mercenaria* (Tschudi, 1844) | C | 1,3,8,12,14 |
| **CUCULIDAE** | | |
| *Coccycua minuta* (Vieillot, 1817) | | 1 |
| *Coccycua pumila* (Strickland, 1852) | | 1,14,15 |
| *Piaya cayana* (Linnaeus, 1766) | C | 1,2,3,6,8,9,10,13,14,15 |
| *Coccyzus melacoryphus* (Vieillot, 1817) | | 1 |
| *Coccyzus americanus* (Linnaeus, 1758) | M | 1,8,9 |
| *Crotophaga ani* (Linnaeus, 1758) | C | 1,2,3,5,9,14,15 |
| *Tapera naevia* (Linnaeus, 1766) | | 1,8,9,14 |
| **TYTONIDAE** | | |
| *Tyto alba* (Scopoli, 1769) | | 1,14 |
| **STRIGIDAE** | | |
| *Megascops choliba* (Vieillot, 1817) | | 1,8,9,14,15 |
| *Megascops colombianus* (Traylor, 1952) | NwR,NT,** | 1,14 |
| *Megascops albogularis* (Cassin, 1849) | C | 1,2 |
| *Pulsatrix perspicillata* (Latham, 1790) | | 1 |
| *Bubo virginianus* (Gmelin, 1788) | | 1 |
| *Ciccaba virgata* (Cassin, 1849) | C | 1,2,8,14 |
| *Ciccaba albitarsis* (Bonaparte, 1850) | C | 1,2,4,7,12,14 |
| *Glaucidium jardinii* (Bonaparte, 1855) | | 1,8,12,14,15 |
| *Pseudoscops clamator* (Vieillot, 1815) | NwR | 1 |
| *Asio stygius* (Wagler, 1832) | Ext,C | 3 |
| **STEATORNITHIDAE** | | |
| *Steatornis caripensis* (Humboldt, 1817) | | 1 |
| **NYCTIBIIDAE** | | |
| *Nyctibius griseus* (Gmelin, 1789) | | 1,8,9,14,15 |
| *Nyctibius maculosus* (Ridgway, 1912) | NwR | 1 |
| **CAPRIMULGIDAE** | | |
| *Lurocalis semitorquatus* (Gmelin, 1789) | NwR | 1 |
| *Nyctidromus albicollis* (Gmelin, 1789) | C | 1,2,5,9,14,15 |
| *Caprimulgus longirostris* (Bonaparte, 1825) | C | 1,2,3,6,7,14 |
| *Chordeiles minor* (Foster, 1771) | M | 1 |
| *Uropsalis lyra* (Bonaparte, 1850) | NwR | 1 |
| **APODIDAE** | | |
| *Streptoprocne rutila* (Vieillot, 1817) | C | 1,5,8,9,14 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Streptoprocne zonaris* (Shaw, 1796) | C | 1,2,3,8,9,12,13,14 |
| *Chaetura cinereiventris* (Sclater, 1862) | C | 1,7,8,14 |
| *Panyptila cayennensis* (Gmelin, 1789) | | 1 |
| **TROCHILIDAE** | | |
| *Florisuga mellivora* (Linnaeus, 1758) | | 1,14,15 |
| *Eutoxeres aquila* (Bourcier, 1847) | NwR | 1 |
| *Glaucis hirsutus* (Gmelin, 1788) | | 1,15 |
| *Threnetes ruckeri* (Bourcier, 1847) | | 1 |
| *Phaethornis striigularis* (Gould, 1854) | | 1,15 |
| *Phaethornis guy* (Lesson, 1832) | C | 1,2,4,5,8,9,14,15 |
| *Phaethornis syrmatophorus* (Gould, 1851) | C | 1,3,4,5,8,14,15 |
| *Doryfera ludovicae* (Bourcier and Mulsant, 1847) | C | 1,3,8,13,15 |
| *Schistes geoffroyi* (Bourcier, 1843) | | 1,8,14,15 |
| *Colibri delphinae* (Lesson, 1839) | | 1,8 |
| *Colibri thalassinus* (Swainson, 1827) | C | 1,2,3,8,13,14,15 |
| *Colibri coruscans* (Gould, 1846) | C | 1,2,8,14,15 |
| *Chrysolampis mosquitus* (Linnaeus, 1758) | | 1,10,15 |
| *Anthracothorax nigricollis* (Vieillot, 1817) | | 1,8,9,10,14,15 |
| *Heliangelus exortis* (Fraser, 1840) | C | 1,2,3,4,5,6,12,14,15 |
| *Adelomyia melanogenys* (Fraser, 1840) | C | 1,2,3,7,8,13,14,15 |
| *Anthocephala floriceps* (Gould, 1854) | NwR,VU,* | 1 |
| *Aglaiocercus kingi* (Lesson, 1823) | C | 1,2,3,8,15 |
| *Opisthoprora euryptera* (Loddiges, 1832) | | 1 |
| *Ramphomicron microrhynchum* (Boissonneau, 1839) | C | 1,2,3,12,14,15 |
| *Chalcostigma herrani* (DeLattre and Bourcier, 1846) | C | 1,4,12,15 |
| *Oxypogon guerinii* (Boissonneau, 1840) | | 1,12 |
| *Metallura tyrianthina* (Loddiges, 1832) | C | 1,2,3,4,7,12,14 |
| *Metallura williami* (DeLattre and Bourcier, 1846) | C | 1,4 |
| *Haplophaedia aureliae* (Bourcier and Mulsant, 1846) | C | 1,3,4,7,8,9,14,15 |
| *Eriocnemis derbyi* (DeLattre and Bourcier, 1846) | NT,**,C | 1,2,3,4,5,7,12,15 |
| *Eriocnemis mosquera* (DeLattre and Bourcier, 1846) | ** | 1,12,15 |
| *Aglaeactis cupripennis* (Bourcier, 1843) | | 1 |
| *Coeligena coeligena* (Lesson, 1833) | | 1,8,13,14,15 |
| *Coeligena torquata* (Boissonneau, 1840) | C | 1,2,3,4,5,6,8,12,14,15 |
| *Coeligena lutetiae* (DeLattre and Bourcier, 1846) | C | 1,2,3,4,12,14 |
| *Lafresnaya lafresnayi* (Boissonneau, 1840) | C | 1,2,4 |
| *Ensifera ensifera* (Boissonneau, 1840) | C | 1,3 |
| *Pterophanes cyanopterus* (Fraser, 1839) | | 1,12 |
| *Boissonneaua flavescens* (Loddiges, 1832) | C | 1,2,3,8,14,15 |
| *Ocreatus underwoodii* (Lesson, 1832) | C | 1,2,3,7,8,13,14,15 |
| *Heliodoxa rubinoides* (Bourcier and Mulsant, 1846) | C | 1,2,3,8,13,15 |
| *Heliomaster longirostris* (Audebert and Vieillot, 1801) | C | 1,2,9,15 |
| *Chaetocercus mulsant* (Bourcier, 1842) | C | 1,2,8,15 |
| *Chaetocercus heliodor* (Bourcier, 1840) | C | 1,2 |
| *Chlorostilbon melanorhynchus* (Gould, 1860) | C | 1,2,5,8,9,10 |
| *Campylopterus falcatus* (Swainson, 1821) | NwR | 1 |
| *Chalybura buffonii* (Lesson, 1832) | | 1,15 |
| *Thalurania colombica* (Bourcier, 1843) | | 1 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Amazilia tzacatl* (De la Llave, 1833) | | 1,9,10,14,15 |
| *Amazilia franciae* (Bourcier and Mulsant, 1846) | **,C | 1,2,8,9,14,15 |
| *Amazilia saucerrottei* (DeLattre and Bourcier, 1846) | C | 1,2,9,10,15 |
| **TROGONIDAE** | | |
| *Pharomachrus auriceps* (Gould, 1842) | C | 1,2,3,8,14,15 |
| *Pharomachrus antisianus* (d'Orbigny, 1837) | | 1 |
| *Trogon collaris* (Vieillot, 1817) | C | 1,3,8,13,14,15 |
| *Trogon personatus* (Gould, 1842) | C | 1,2,3,7,12,13,14,15 |
| **ALCEDINIDAE** | | |
| *Megaceryle torquata* (Linnaeus, 1766) | | 1,11,15 |
| *Chloroceryle amazona* (Latham, 1790) | | 1,11,15 |
| *Chloroceryle americana* (Gmelin, 1788) | | 1,11 |
| **MOMOTIDAE** | | |
| *Momotus aecuatorialis* (Gould, 1857) | C | 1,2,3,5,6,8,9,10,13,14,15 |
| **BUCCONIDAE** | | |
| *Malacoptila mystacalis* (Lafresnaye, 1850) | C | 1,2,3,4,8,9,13,14,15 |
| **CAPITONIDAE** | | |
| *Eubucco bourcierii* (Lafresnaye, 1845) | | 1,8,9,14,15 |
| **RAMPHASTIDAE** | | |
| *Aulacorhynchus prasinus* (Gould, 1834) | C | 1,2,3,7,8,13,14 |
| *Aulacorhynchus haematopygus* (Gould, 1835) | C | 1,2,3,5,7,8,9,13,14,15 |
| *Andigena hypoglauca* (Gould, 1833) | VU,C | 1,2,3,12,13,14,15 |
| *Andigena nigrirostris* (Waterhouse, 1839) | NT,C | 1,2,3,4,7,14,15 |
| **PICIDAE** | | |
| *Picumnus olivaceus* (Lafresnaye, 1845) | | 1 |
| *Picumnus granadensis* (Lafresnaye, 1847) | *,C | 1,2,3,9,10,14,15 |
| *Melanerpes formicivorus* (Swainson, 1827) | C | 1,2,3,6,8,9,10,14,15 |
| *Melanerpes rubricapillus* (Cabanis, 1862) | | 1,9,14,15 |
| *Picoides fumigatus* (d'Orbigny, 1840) | | 1,8,9,14 |
| *Veniliornis kirkii* (Malherbe, 1845) | | 1 |
| *Veniliornis dignus* (Sclater and Salvin, 1877) | C | 1,2,3,7,13,15 |
| *Veniliornis nigriceps* (d'Orbigny, 1840) | | 1,12,13,15 |
| *Colaptes rubiginosus* (Swainson, 1820) | C | 1,2,3,6,8,14,15 |
| *Colaptes rivolii* (Boissonneau, 1840) | C | 1,2,3,4,7,12,13,14,15 |
| *Colaptes punctigula* (Boddaert, 1783) | | 1,8,10 |
| *Dryocopus lineatus* (Linnaeus, 1766) | | 1,9,10,14,15 |
| *Campephilus pollens* (Bonaparte, 1845) | C | 1,2,3,12 |
| *Campephilus melanoleucos* (Gmelin, 1788) | C | 1,3,8,13,14,15 |
| **FURNARIIDAE** | | |
| *Cinclodes excelsior* (Sclater, 1860) | | 1 |
| *Schizoeaca fuliginosa* (Lafresnaye, 1843) | | 1,12 |
| *Synallaxis azarae* (d'Orbigny, 1835) | C | 1,2,3,4,5,6,7,8,13,14,15 |
| *Synallaxis albescens* (Temminck, 1823) | | 1,9,14 |
| *Synallaxis unirufa* (Lafresnaye, 1843) | | 1,12 |
| *Synallaxis brachyura* (Lafresnaye, 1843) | | 1,9,10,14 |
| *Hellmayrea gularis* (Lafresnaye, 1843) | C | 1,3,4,12,13,15 |
| *Cranioleuca erythrops* (Sclater, 1860) | C | 1,2,5,8,9,14,15 |
| *Asthenes flammulata* (Jardine, 1850) | | 1,13 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Premnornis guttuligera* (Sclater, 1864) | C | 1,2 |
| *Premnoplex brunnescens* (Sclater, 1856) | C | 1,3,4,8,14,15 |
| *Margarornis squamiger* (d'Orbigny and Lafresnaye, 1838) | C | 1,2,3,4,5,6,12,14,15 |
| *Pseudocolaptes boissonneautii* (Lafresnaye, 1840) | C | 1,2,3,4,6,12,14,15 |
| *Anabacerthia striaticollis* (Lafresnaye, 1842) | C | 1,2,3,6,7,8,13,14,15 |
| *Syndactyla subalaris* (Sclater, 1859) | | 1,8,14,15 |
| *Thripadectes holostictus* (Sclater and Salvin, 1876) | C | 1,2,4,8 |
| *Thripadectes virgaticeps* (Lawrence, 1874) | | 1,14,15 |
| *Thripadectes flammulatus* (Eyton, 1849) | C | 1,3 |
| *Lochmias nematura* (Lichtenstein, 1823) | | 1,9,14,15 |
| *Xenops minutus* (Sparrman, 1788) | Ext,C | 3 |
| *Xenops rutilans* (Temminck, 1821) | C | 1,2,3,8 |
| *Dendrocincla tyrannina* (Lafresnaye, 1851) | C | 1,2,3,4 |
| *Dendrocincla fuliginosa* (Vieillot, 1818) | C | 1,4,14,15 |
| *Sittasomus griseicapillus* (Vieillot, 1818) | | 1,8 |
| *Glyphorynchus spirurus* (Vieillot, 1819) | | 1,13,15 |
| *Xiphocolaptes promeropirhynchus* (Lesson, 1840) | C | 1,2,3,4,8,14 |
| *Dendrocolaptes picumnus* (Lichtenstein, 1820) | C | 1,2,3,4,8,14,15 |
| *Xiphorhynchus susurrans* (Jardine, 1847) | | 1,15 |
| *Xiphorhynchus triangularis* (Lafresnaye, 1842) | C | 1,3 |
| *Lepidocolaptes souleyetii* (Des Murs, 1849) | C | 1,4,10,14,15 |
| *Lepidocolaptes lacrymiger* (Des Murs, 1849) | C | 1,2,3,6,7,8,9,13,14,15 |
| *Campylorhamphus pusillus* (Sclater, 1860) | | 1,14,15 |
| *Campylorhamphus pucheranii* (Des Murs, 1849) | | 1 |
| **TAMNOPHILIDAE** | | |
| *Taraba major* (Vieillot, 1816) | | 1,9,10,14,15 |
| *Thamnophilus multistriatus* (Lafresnaye, 1844) | ** | 1,8,9,10,14,15 |
| *Thamnophilus atrinucha* (Salvin and Godman, 1892) | | 1,14,15 |
| *Thamnophilus unicolor* (Sclater, 1859) | | 1,8 |
| *Dysithamnus mentalis* (Temminck, 1823) | C | 1,3,4,8,14,15 |
| *Myrmotherula schisticolor* (Lawrence, 1865) | | 1,8,14,15 |
| *Drymophila caudata* (Sclater, 1855) | C | 1,3,8,13 |
| *Cercomacra parkeri* (Graves, 1997) | * | 1,14,15 |
| *Cercomacra nigricans* (Sclater, 1858) | | 1,9,10,14 |
| *Myrmeciza immaculata* (Lafresnaye, 1845) | | 1,14 |
| **FORMICARIIDAE** | | |
| *Formicarius rufipectus* (Salvin, 1866) | C | 1,3 |
| *Chamaeza mollissima* (Sclater, 1855) | C | 1,3 |
| **GRALLARIIDAE** | | |
| *Grallaria squamigera* (Prévost and des Murs, 1846) | C | 1,3,4,12,14 |
| *Grallaria alleni* (Chapman, 1912) | EN,C | 1,3,13,14,15 |
| *Grallaria guatimalensis* (Prévost and Des Murs, 1846) | | 1,9,13,14 |
| *Grallaria ruficapilla* (Lafresnaye, 1842) | C | 1,2,3,6,7,8,14 |
| *Grallaria rufocinerea* (Sclater and Salvin, 1879) | VU,** | 1 |
| *Grallaria nuchalis* (Sclater, 1859) | C | 1,2,3,7,12,14 |
| *Grallaria rufula* (Lafresnaye, 1843) | C | 1,3,12,14 |
| *Grallaria quitensis* (Lesson, 1844) | C | 1,7 |
| *Grallaria milleri* (Chapman, 1912) | EN,*,C | 1,3,7,13 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Grallaricula nana* (Lafresnaye, 1842) | C | 1,2,3,4 |
| *Grallaricula cucullata* (Sclater, 1856) | NwR,NT, | 1,15 |
| *Grallaricula lineifrons* (Chapman, 1924) | VU,** | 1,13 |
| **RHINOCRYPTIDAE** | | |
| *Myornis senilis* (Lafresnaye, 1840) | C | 1,2,3 |
| *Scytalopus latrans* (Hellmayr, 1924) | C | 1,2,3,7 |
| *Scytalopus atratus* (Hellmayr, 1922) | C | 1,3,7,8,14 |
| *Scytalopus stilesi* (Cuervo *et al*. 2005) | * | 1 |
| *Scytalopus spillmanni* (Stressemann, 1937) | | 1,12,14,15 |
| *Scytalopus vicinior* (Zimmer, 1939) | | 1 |
| *Scytalopus canus* (Chapman, 1915) | | 1,12,14 |
| *Acropternis orthonyx* (Lafresnaye, 1843) | C | 1,3,12,14 |
| **TYRANNIDAE** | | |
| *Phyllomyias griseiceps* (Sclater and Salvin, 1871) | C | 1,2,10,14,15 |
| *Phyllomyias nigrocapillus* (Lafresnaye, 1845) | C | 1,2,3,4,12,14,15 |
| *Phyllomyias cinereiceps* (Sclater, 1860) | C | 1,3,8 |
| *Phyllomyias uropygialis* (Lawrence, 1869) | | 1,8 |
| *Phyllomyias plumbeiceps* (Lawrence, 1869) | C | 1,3 |
| *Myiopagis viridicata* (Vieillot, 1817) | | 1,10 |
| *Elaenia flavogaster* (Thunberg, 1822) | C | 1,2,8,9,10,14,15 |
| *Elaenia frantzii* (Lawrence, 1865) | C | 1,2,3,8,15 |
| *Elaenia pallatangae* (Sclater, 1861) | Ext,C | 2 |
| *Camptostoma obsoletum* (Temminck, 1824) | | 1,9,10,14 |
| *Mecocerculus poecilocercus* (Sclater and Salvin, 1873) | C | 1,2,3,7,15 |
| *Mecocerculus stictopterus* (Sclater, 1858) | C | 1,2,3,4,6,12,14,15 |
| *Mecocerculus leucophrys* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,4,12,14 |
| *Anairetes agilis* (Sclater, 1856) | ** | 1,12 |
| *Serpophaga cinerea* (Tschudi, 1844) | C | 1,2,3,7,11,15 |
| *Phaeomyias murina* (Spix, 1825) | | 1 |
| *Pseudocolopteryx acutipennis* (Sclater and Salvin, 1873) | VU | 1 |
| *Pseudotriccus pelzelni* (Taczanowski and Berlepsch, 1885) | | 1,8,14,15 |
| *Pseudotriccus ruficeps* (Lafresnaye, 1843) | C | 1,3,4,8,12,14 |
| *Zimmerius chrysops* (Sclater, 1859) | C | 1,2,4,8,9,10,14,15 |
| *Phylloscartes poecilotis* (Sclater, 1862) | C | 1,2,3,7,8,14,15 |
| *Phylloscartes ophthalmicus* (Taczanowski, 1874) | C | 1,3,7,8,14,15 |
| *Mionectes striaticollis* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,5,8,13,14,15 |
| *Mionectes olivaceus* (Lawrence, 1868) | | 1,14,15 |
| *Mionectes oleagineus* (Lichtenstein, 1823) | | 1,8,9,14,15 |
| *Leptopogon superciliaris* (Tschudi, 1844) | C | 1,2,9,10,14,15 |
| *Leptopogon rufipectus* (Lafresnaye, 1846) | **,C | 1,2,5,7,8,14,15 |
| *Lophotriccus pileatus* (Tschudi, 1844) | C | 1,2,8,14,15 |
| *Hemitriccus granadensis* (Hartlaub, 1843) | C | 1,3 |
| *Poecilotriccus ruficeps* (Kaup, 1852) | C | 1,2,3,7,13,14 |
| *Poecilotriccus sylvia* (Desmarest, 1806) | | 1,10,14 |
| *Todirostrum cinereum* (Linnaeus, 1766) | C | 1,2,9,10,14,15 |
| *Tolmomyias sulphurescens* (Spix, 1825) | | 1 |
| *Platyrinchus mystaceus* (Vieillot, 1818) | C | 1,2,4,15 |
| *Myiophobus flavicans* (Sclater, 1860) | C | 1,2,3,6,7,14,15 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Myiophobus fasciatus* (Statius Müller, 1776) | C | 1,3,9,15 |
| *Pyrrhomyias cinnamomeus* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,4,7,8,13,14,15 |
| *Empidonax virescens* (Vieillot, 1818) | M | 1,8,9,14,15 |
| *Empidonax traillii* (Audubon, 1818) | M | 1 |
| *Contopus cooperi* (Nuttall, 1831) | M | 1 |
| *Contopus fumigatus* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3 |
| *Contopus sordidulus* (Sclater, 1859) | M | 1 |
| *Contopus virens* (Linnaeus, 1766) | M | 1,14 |
| *Contopus cinereus* (Spix, 1825) | NwR | 1,14 |
| *Sayornis nigricans* (Swainson, 1827) | C | 1,2,9,11,14,15 |
| *Pyrocephalus rubinus* (Boddaert, 1783) | C | 1,2,9,14,15 |
| *Muscisaxicola alpinus* (Jardine, 1849) | | 1,15 |
| *Myiotheretes striaticollis* (Sclater, 1853) | C | 1,2,12 |
| *Myiotheretes fumigatus* (Boissonneau, 1840) | C | 1,2,3,4,12 |
| *Fluvicola pica* (Boddaert, 1783) | | 1,9,10,11,15 |
| *Ochthoeca frontalis* (Lafresnaye, 1847) | | 1,12,15 |
| *Ochthoeca diadema* (Hartlaub, 1843) | C | 1,3,4,5,7,12 |
| *Ochthoeca cinnamomeiventris* (Lafresnaye, 1843) | C | 1,2,3,4,5,12,13,14,15 |
| *Ochthoeca rufipectoralis* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,4,6,7,12 |
| *Ochthoeca fumicolor* (Sclater, 1856) | C | 1,2,3,4,12,15 |
| *Colonia colonus* (Vieillot, 1818) | NwR | 1 |
| *Machetornis rixosa* (Vieillot, 1819) | | 1,9,15 |
| *Legatus leucophaius* (Vieillot, 1818) | | 1,8,14 |
| *Myiozetetes cayanensis* (Linnaeus, 1766) | C | 1,2,8,9,10,14,15 |
| *Myiozetetes similis* (Spix, 1825) | | 1,10,14 |
| *Pitangus sulphuratus* (Linnaeus, 1766) | | 1,8,9,10,14,15 |
| *Myiodynastes chrysocephalus* (Tschudi, 1844) | C | 1,3,7,8,14,15 |
| *Myiodynastes luteiventris* (Sclater, 1859) | M | 1,15 |
| *Myiodynastes maculatus* (Statius Müller, 1776) | | 1,9,10,14,15 |
| *Tyrannus melancholicus* (Vieillot, 1819) | C | 1,2,3,8,9,10,14,15 |
| *Tyrannus savana* (Vieillot, 1808) | | 1,8,15 |
| *Tyrannus tyrannus* (Linnaeus, 1758) | M | 1,9,15 |
| *Myiarchus tuberculifer* (d'Orbigny and Lafresnaye, 1837) | | 1 |
| *Myiarchus apicalis* (Sclater and Salvin, 1881) | * | 1,10 |
| *Myiarchus cephalotes* (Taczanowski, 1879) | C | 1,2,3,8,15 |
| *Myiarchus crinitus* (Linnaeus, 1758) | M | 1,10,15 |
| **COTINGIDAE** | | |
| *Pipreola riefferii* (Boissonneau, 1840) | C | 1,2,3,4,5,12,13,14,15 |
| *Pipreola arcuata* (Lafresnaye, 1843) | C | 1,3,4,7,12 |
| *Doliornis remseni* (Robbins et al., 1994) | EN | 1,13 |
| *Ampelion rubrocristatus* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,12,14,15 |
| *Ampelion rufaxilla* (Tschudi, 1844) | NT,Ext,C | 2 |
| *Rupicola peruvianus* (Latham, 1790) | C | 1,3,13,14,15 |
| *Pyroderus scutatus* (Shaw, 1792) | C | 1,3,7,8,9,13,14,15 |
| *Lipaugus fuscocinereus* (Lafresnaye, 1843) | C | 1,2,3,7 |
| **PIPRIDAE** | | |
| *Masius chrysopterus* (Lafresnaye, 1843) | C | 1,4,7,8,13,15 |
| *Machaeropterus regulus* (Hahn, 1819) | NwR | 1 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Manacus manacus* (Linnaeus, 1766) | | 1,15 |
| *Xenopipo flavicapilla* (Sclater, 1852) | NT,**,C | 1,3,4,8,15 |
| *Pipra erythrocephala* (Linnaeus, 1758) | | 1 |
| **TITYRIDAE** | | |
| *Pachyramphus versicolor* (Hartlaub, 1843) | | 1,12 |
| *Pachyramphus rufus* (Boddaert, 1783) | | 1,9,10 |
| *Pachyramphus polychopterus* (Vieillot, 1818) | C | 1,7,8,14,15 |
| *Pachyramphus albogriseus* (Sclater, 1857) | NwR | 1 |
| **VIREONIDAE** | | |
| *Cyclarhis nigrirostris* (Lafresnaye, 1842) | C | 1,2,3,8,14 |
| *Vireo flavifrons* (Vieillot, 1808) | M,C | 1,2,8 |
| *Vireo leucophrys* (Lafresnaye, 1844) | C | 1,2,3,8,14 |
| *Vireo olivaceus* (Linnaeus, 1766) | C | 1,2,9,10,14,15 |
| *Hylophilus semibrunneus* (Lafresnaye, 1845) | C | 1,2,7,9,10,14 |
| **CORVIDAE** | | |
| *Cyanolyca armillata* (Gray, 1845) | C | 1,2,3,6,7,12,14,15 |
| *Cyanocorax yncas* (Boddaert, 1783) | C | 1,2,3,6,7,8,9,13,14,15 |
| **HIRUNDINIDAE** | | |
| *Pygochelidon cyanoleuca* (Vieillot, 1817) | C | 1,2,3,5,8,9,14,15 |
| *Orochelidon murina* (Cassin, 1853) | C | 1,2,12,14,15 |
| *Orochelidon flavipes* (Chapman, 1922) | C | 1,5 |
| *Stelgidopteryx ruficollis* (Vieillot, 1817) | C | 1,2,3,9,10,14,15 |
| *Progne tapera* (Linnaeus, 1766) | | 1,14 |
| *Riparia riparia* (Linnaeus, 1758) | M | 1 |
| *Hirundo rustica* (Linnaeus, 1758) | | 1,9 |
| **TROGLODYTIDAE** | | |
| *Microcerculus marginatus* (Scalter, 1855) | | 1,14 |
| *Troglodytes aedon* (Vieillot, 1809) | | 1,9,10,14,15 |
| *Troglodytes solstitialis* (Sclater, 1859) | C | 1,2,3,4,6,7,12,13,14 |
| *Cistothorus platensis* (Latham, 1790) | | 1,12,14,15 |
| *Thryothorus mystacalis* (Sclater, 1860) | C | 1,2,3,8,14 |
| *Thryothorus sclateri* (Taczanowski, 1879) | | 1,9,14 |
| *Cinnycerthia unirufa* (Lafresnaye, 1840) | C | 1,3,12 |
| *Cinnycerthia olivascens* (Sharpe, 1881) | C | 1,2,3,4,7 |
| *Henicorhina leucosticta* (Cabanis, 1847) | | 1,8,9,14,15 |
| *Henicorhina leucophrys* (Tschudi, 1844) | C | 1,2,3,8,12,14,15 |
| *Cyphorhinus thoracicus* (Tschudi, 1844) | NwR | 1 |
| **POLIOPTILIDAE** | | |
| *Ramphocaenus melanurus* (Vieillot, 1819) | C | 1,2,3,13 |
| *Polioptila plumbea* (Gmenil, 1788) | | 1,9,10,14,15 |
| **CINCLIDAE** | | |
| *Cinclus leucocephalus* (Tschudi, 1844) | C | 1,2,3,14,15 |
| **TURDIDAE** | | |
| *Myadestes ralloides* (d'Orbigny, 1840) | | 1,8,14,15 |
| *Catharus aurantiirostris* (Hartlaub, 1850) | C | 1,2,8,9,14 |
| *Catharus fuscater* (Lafresnaye, 1845) | | 1,13,15 |
| *Catharus minimus* (Lafresnaye, 1848) | M | 1,9,14 |
| *Catharus ustulatus* (Nuttall, 1840) | M,C | 1,2,3,8,9,14 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Turdus leucops* (Taczanowsky, 1877) | | 1,8 |
| *Turdus grayi* (Bonaparte, 1838) | NwR | 1 |
| *Turdus ignobilis* (Sclater, 1857) | C | 1,2,3,4,8,9,14,15 |
| *Turdus fuscater* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,4,7,8,12,13,14,15 |
| *Turdus serranus* (Tschudi, 1844) | C | 1,4,5,8,14 |
| **MIMIDAE** | | |
| *Mimus gilvus* (Vieillot, 1808) | C | 1,3,15 |
| **THRAUPIDAE** | | |
| *Sericossypha albocristata* (Lafresnaye, 1843) | | 1,12,14,15 |
| *Creurgops verticalis* (Sclater, 1858) | C | 1,3 |
| *Hemispingus atropileus* (Lafresnaye, 1842) | C | 1,2,3,4,12 |
| *Hemispingus superciliaris* (Lafresnaye, 1840) | C | 1,2,3,12 |
| *Hemispingus frontalis* (Tschudi, 1844) | C | 1,2,3,6,7,14 |
| *Hemispingus melanotis* (Sclater, 1855) | | 1 |
| *Hemispingus verticalis* (Lafresnaye, 1840) | C | 1,2,3,4,12,14 |
| *Cnemoscopus rubrirostris* (Lafresnaye, 1840) | C | 1,2,3,7 |
| *Eucometis penicillata* (Spix, 1825) | NwR | 1 |
| *Tachyphonus luctuosus* (d'Orbigny and Lafresnaye, 1837) | | 1,8,15 |
| *Tachyphonus rufus* (Boddaert, 1783) | | 1 |
| *Ramphocelus dimidiatus* (Lafresnaye, 1837) | | 1,14 |
| *Ramphocelus flammigerus* (Jardine and Selby, 1833) | *,C | 1,2,3,5,7,8,9,14,15 |
| *Thraupis episcopus* (Linnaeus, 1766) | C | 1,2,4,7,8,9,10,14,15 |
| *Thraupis palmarum* (Wied, 1821) | C | 1,2,8,9,10,14,15 |
| *Thraupis cyanocephala* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,4,7,13,14,15 |
| *Buthraupis montana* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,7,12,14 |
| *Buthraupis eximia* (Boissenneau, 1840) | C | 1,4,12,14 |
| *Buthraupis wetmorei* (Moore, 1934) | VU | 1,12,13,15 |
| *Anisognathus lacrymosus* (Du Bus, 1846) | C | 1,2,3,4,7,12,14 |
| *Anisognathus igniventris* (d'Orbigny and Lafresnaye, 1837) | C | 1,4,14,12,15 |
| *Anisognathus somptuosus* (Lesson, 1831) | C | 1,2,3,8,13,14,15 |
| *Chlorornis riefferii* (Boissonneau, 1840) | C | 1,2,3,4,6,7,14,15 |
| *Dubusia taeniata* (Boissonneau, 1840) | C | 1,2,4,12,14 |
| *Iridosornis rufivertex* (Lafresnaye, 1842) | | 1,12 |
| *Pipraeidea melanonota* (Vieillot, 1819) | C | 1,2,7,8 |
| *Chlorochrysa nitidissima* (Sclater, 1873) | VU,*,C | 1,3,7,8,14,15 |
| *Tangara ruficervix* (Prévost and des Murs, 1846) | C | 1,3 |
| *Tangara heinei* (Cabanis, 1850) | C | 1,2,5,8,14,15 |
| *Tangara vitriolina* (Cabanis, 1850) | **,C | 1,2,3,5,8,9,10,14,15 |
| *Tangara cyanicollis* (d'Orbigny and Lafresnaye, 1837) | | 1,9,10,14,15 |
| *Tangara vassorii* (Boissoneau, 1840) | C | 1,2,3,4,8,12,13,15 |
| *Tangara nigroviridis* (Lafresnaye, 1843) | C | 1,3,5,8,15 |
| *Tangara labradorides* (Boissonneau, 1840) | C | 1,3,8 |
| *Tangara gyrola* (Linnaeus, 1758) | C | 1,2,8,9,14,15 |
| *Tangara xanthocephala* (Tschudi, 1844) | C | 1,2,3 |
| *Tangara arthus* (Lesson, 1832) | | 1,8,9,14,15 |
| *Dacnis hartlaubi* (Sclater, 1855) | VU,*,C | 1,5,8,15 |
| *Chlorophanes spiza* (Linnaeus, 1758) | C | 1,2,3,5,7,8,9,10,14,15 |
| *Hemithraupis guira* (Linnaeus, 1766) | | 1,9,10,15 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Conirostrum sitticolor* (Lafresnaye, 1840) | C | 1,2,3,7,12,14 |
| *Conirostrum albifrons* (Lafresnaye, 1842) | C | 1,2,6 |
| *Diglossa sittoides* (d'Orbigny and Lafresnaye, 1838) | C | 1,2,3,8,14 |
| *Diglossa lafresnayii* (Boissonneau, 1840) | C | 1,3,4,12,14 |
| *Diglossa humeralis* (Fraser, 1840) | C | 1,2,3,12,14 |
| *Diglossa albilatera* (Lafresnaye, 1843) | C | 1,2,3,5,13,14 |
| *Diglossa caerulescens* (Sclater, 1856) | C | 1,2,14,15 |
| *Diglossa cyanea* (Lafresnaye, 1840) | C | 1,2,4,7,12,13 |
| *Catamblyrhynchus diadema* (Lafresnaye, 1842) | C | 1,3 |
| *Urothraupis stolzmanni* (Taczanowski and Berlepsch, 1885) | C | 1,4,12,15 |
| ***INCERTAE SEDIS*** | | |
| *Chlorospingus ophthalmicus* (Du Bus, 1847) | C | 1,2,5,7,8,13,14,15 |
| *Chlorospingus canigularis* (Lafresnaye, 1848) | C | 1,3,7,8,13,14,15 |
| *Coereba flaveola* (Linnaeus, 1758) | | 1,8,9,10, 14,15 |
| *Tiaris olivaceus* (Linnaeus, 1766) | C | 1,2,3,7,9,14,15 |
| *Tiaris obscurus* (d'Orbigny and Lafresnaye, 1837) | NwR | 1,14 |
| *Saltator atripennis* (Sclater, 1856) | C | 1,2,3,8,9,13,14,15 |
| *Saltator striatipectus* (Lafresnaye, 1847) | C | 1,2,9,10,14,15 |
| *Saltator cinctus* (Zimmer, 1943) | VU,C | 1,4,13 |
| **EMBERIZIDAE** | | |
| *Zonotrichia capensis* (Statius Müller, 1776) | C | 1,2,3,4,5,14,15 |
| *Ammodramus savannarum* (Gmelin, 1789) | CR | 1 |
| *Ammodramus humeralis* (Bosc, 1792) | | 1,15 |
| *Phrygilus unicolor* (d'Orbigny and Lafresnaye, 1837) | | 1 |
| *Haplospiza rustica* (Tschudi, 1844) | C | 1,2,4,12 |
| *Sicalis citrina* (Pelzeln, 1870) | | 1,8 |
| *Sicalis flaveola* (Linnaeus, 1766) | | 1,9,14,15 |
| *Emberizoides herbicola* (Vieillot, 1817) | | 1 |
| *Volatinia jacarina* (Linnaeus, 1766) | C | 1,2,9,14,15 |
| *Sporophila schistacea* (Lawrence, 1862) | | 1 |
| *Sporophila intermedia* (Cabanis, 1851) | C | 1,2,8,9,14,15 |
| *Sporophila luctuosa* (Lafresnaye, 1843) | | 1,15 |
| *Sporophila nigricollis* (Vieillot, 1823) | C | 1,2,4,9,14,15 |
| *Sporophila minuta* (Linnaeus, 1758) | C | 1,2,7,9 |
| *Oryzoborus angolensis* (Linnaeus, 1766) | NwR | 1 |
| *Oryzoborus crassirostris* (Gmelin, 1789) | | 1,9,15 |
| *Catamenia analis* (d'Orbigny and Lafresnaye, 1837) | | 1 |
| *Catamenia inornata* (Lafresnaye, 1847) | | 1 |
| *Catamenia homochroa* (Sclater, 1858) | C | 1,3,4,12 |
| *Arremon brunneinucha* (Lafresnaye, 1839) | C | 1,2,3,7,8,9,14,15 |
| *Arremon torquatus* (d'Orbigny and Lafresnaye, 1837) | C | 1,2,3,4,12,15 |
| *Atlapetes albinucha* (d'Orbigny and Lafresnaye, 1838) | C | 1,2,3,7,8,13,14,15 |
| *Atlapetes pallidinucha* (Boissonneau, 1840) | C | 1,3,4,12,13 |
| *Atlapetes schistaceus* (Boissonneau, 1840) | C | 1,2,3,4,6,7,12,14,15 |
| **CARDINALIDAE** | | |
| *Piranga flava* (Vieillot, 1822) | | 1,8,14,15 |
| *Piranga rubra* (Linnaeus, 1758) | M,C | 1,3,4,5,8,9,10,14,15 |
| *Piranga olivacea* (Gmelin, 1789) | M | 1,10 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Piranga rubriceps* (Gray, 1844) | C | 1,2,3,7 |
| *Piranga leucoptera* (Trudeau, 1839) | | 1 |
| *Habia cristata* (Lawrence, 1875) | * | 1,8,15 |
| *Pheucticus ludovicianus* (Linnaeus, 1766) | M,C | 1,3,8,9,10,14,15 |
| *Cyanocompsa brissonii* (Lichtenstein, 1823) | | 1 |
| *Spiza americana* (Gmelin, 1789) | M | 1 |
| **PARULIDAE** | | |
| *Vermivora chrysoptera* (Linnaeus, 1766) | NT,M,C | 1,3 |
| *Vermivora peregrina* (Wilson, 1811) | M | 1,8,9,10,15 |
| *Parula pitiayumi* (Vieillot, 1817) | C | 1,3,5,8,9,10,14,15 |
| *Dendroica petechia* (Linnaeus, 1766) | M | 1,9,10,15 |
| *Dendroica striata* (Foster, 1772) | M | 1 |
| *Dendroica castanea* (Wilson, 1810) | M | 1,15 |
| *Dendroica fusca* (Statius Müller, 1776) | M,C | 1,2,3,4,7,8,9,10,12,13,14,15 |
| *Dendroica cerulea* (Wilson, 1810) | VU,M | 1,8,15 |
| *Setophaga ruticilla* (Linnaeus, 1758) | M,C | 1,3,5,8,9 |
| *Mniotilta varia* (Linnaeus, 1766) | M,C | 1,2,3,8,9,10,15 |
| *Protonotaria citrea* (Boddaert, 1783) | M | 1 |
| *Seiurus noveboracensis* (Gmelin, 1789) | M,C | 1,3,9,14,15 |
| *Oporornis philadelphia* (Wilson, 1810) | M | 1,9,10,15 |
| *Wilsonia canadensis* (Linnaeus, 1766) | M,C | 1,2,8,10,14,15 |
| *Myioborus miniatus* (Swainson, 1827) | C | 1,2,3,8,14,15 |
| *Myioborus ornatus* (Boissonneau, 1840) | **,C | 1,2,3,4,5,7,12,14,15 |
| *Basileuterus luteoviridis* (Bonaparte, 1845) | C | 1,2,3,4,12,13 |
| *Basileuterus nigrocristatus* (Lafresnaye, 1840) | C | 1,2,4,7 |
| *Basileuterus coronatus* (Tschudi, 1844) | C | 1,2,3,4,7,8,13,14,15 |
| *Basileuterus culicivorus* (Deppe, 1830) | | 1,14,15 |
| *Basileuterus tristriatus* (Tschudi, 1844) | C | 1,2,3,7,8,14,15 |
| *Phaeothlypis fulvicauda* (Spix, 1825) | | 1,14,15 |
| **ICTERIDAE** | | |
| *Psarocolius angustifrons* (Spix, 1824) | Ext,C | 2,3,7 |
| *Psarocolius decumanus* (Pallas, 1769) | Ext,C | 3 |
| *Cacicus chrysonotus* (d'Orbigny and Lafresnaye, 1838) | C | 1,2,3,6,12,15 |
| *Cacicus cela* (Linnaeus, 1758) | NwR | 1,15 |
| *Cacicus uropygialis* (Lafresnaye, 1843) | Ext,NT,C | 2,3 |
| *Amblycercus holosericeus* (Deppe, 1830) | | 1 |
| *Icterus spurius* (Linnaeus, 1766) | | 1,15 |
| *Icterus chrysater* (Lesson, 1844) | C | 1,3,8,14,15 |
| *Icterus galbula* (Linnaeus, 1758) | M | 1,15 |
| *Icterus nigrogularis* (Hahn, 1819) | | 1,15 |
| *Hypopyrrhus pyrohypogaster* (de Tarragon, 1847) | Ext,EN,*,C | 3,7 |
| *Chrysomus icterocephalus* (Linnaeus, 1766) | | 1 |
| *Molothrus oryzivorus* (Gmelin, 1788) | | 1,9,14 |
| *Molothrus bonariensis* (Gmelin, 1789) | C | 1,2,5,9,14,15 |
| *Sturnella militaris* (Linnaeus, 1758) | | 1,15 |
| **FRINGILLIDAE** | | |
| *Carduelis spinescens* (Bonaparte, 1850) | | 1,12,15 |
| *Carduelis magellanica* (Vieillot, 1805) | C | 1,2,12,14,15 |

**Table 2.** ***Continued.***

| FAMILY / SPECIES | INFORMATION ON SPECIES | SOURCE |
|---|---|---|
| *Carduelis xanthogastra* (Du Bus, 1855) | C | 1,2,8,9,14,15 |
| *Carduelis psaltria* (Say, 1823) | C | 1,2,9,14,15 |
| *Euphonia saturata* (Cabanis, 1860) | | 1 |
| *Euphonia laniirostris* (d'Orbigny and Lafresnaye, 1837) | | 1,9,14,15 |
| *Euphonia cyanocephala* (Vieillot, 1819) | C | 1,2,8 |
| *Euphonia xanthogaster* (Sundevall, 1834) | C | 1,3,7,8,14,15 |
| *Chlorophonia cyanea* (Thunberg, 1822) | | 1,8,14,15 |
| *Chlorophonia pyrrhophrys* (Sclater, 1851) | C | 1,4,12 |

The column "source" lists the information gathered for each species as indicated: **1** = Field observations by the authors. **2-7** = Vouchers in museums and ornithological collections [**2** = Academy of Natural Sciences, Philadelphia; **3** = American Museum of Natural History, New York; **4** = Universidad del Valle, Cali; **5** = Instituto de Ciencias Naturales, Bogotá; **6** = National Museum of Natural History, Smithsonian Institution, Washington]. **7** = Other collections with less than 30 species (Field Museum of Natural History, Chicago. Museo de Ciencias Naturales de La Salle, Bogotá. London Natural History Museum, Tring. Museum of comparative zoology. Harvard University, Boston. Muséum National d'Histoire Naturelle, Paris. Museum of Zoology, Michigan State University, East Lansing. Cornell University Museum of Vertebrates, Ithaca. Universidad de Caldas, Manizales). **8-12** = Major publications [**8** = Renjifo (1999, 2001); **9** = Marín (2005); **10** = Marín-Gómez (2007); **11** = Duque (2005); **12** = Arbeláez-Cortés *et al*. (2011)]. **13** = Other publications including few species (Chapman 1912; 1913; 1914; 1915; 1921; 1923; 1925; Renjifo 1991; 1994; Rivera-Pedroza and Ramírez 2005; Arbeláez-Cortés and Baena-Tovar 2006; Arbeláez-Cortés 2007; Marín-Gómez 2009). **14-15** = Additional evidence [**14** = Audio recordings; **15** = Photos].


**Figure 3.** Noteworthy bird species recorded in Quindío department, Colombia. A, *Hapalopsittaca fuertesi*, a critically endangered and Colombian Central Andes endemic species; B, *Andigena hypoglauca*, a vulnerable and uncommon species; C, *Andigena nigrirostris*, a near threatened species; D, *Pharomachrus auriceps*, an uncommon quetzal that inhabits montane forests. Photos by OHMG.


**Figure 4.** Noteworthy bird species recorded in Quindío department, Colombia. A, *Picumnus granadensis*, a Colombian endemic species; B, *Cercomacra parkeri* (female), a Colombian endemic species that inhabits pre-montane forests; C, *Xenopipo flavicapilla*, a near threatened and Colombian semiendemic species; D, *Rupicola peruvianus*, a spectacular species that inhabits pre-montane forests; E, *Dacnis hartlaubi*, a vulnerable and Colombian endemic species; F, *Chlorophonia cyanea*, a species with scarce records along the Central Andes of Colombia. Photos A-E by OHMG and Photo F by EAC.

**Table 3.** New records of bird species for Quindío, Colombia.

| SPECIES | LOCALITY | DATE OF RECORD | ADDITIONAL INFORMATION |
|---|---|---|---|
| *Aythya affinis* (Eyton, 1838) | Rancho California, Calarcá | March 2010 | |
| *Gampsonyx swainsonii* (Vigors, 1825) | Finca Montecristo, Vereda La India, Armenia and Finca Santa Lucia, Vereda Santa Rita, Montenegro | July and December 2006 | |
| *Accipiter collaris* (Sclater, 1860) | Vereda Arenales, Pijao | May 2007 and January 2008 | |
| *Phalcoboenus carunculatus* (Des Murs, 1853) | Finca La Argentina, Alto Quindío, Salento; Finca El Brillante and Finca La Bastilla, Genova | February 2007 and May 2010 | |
| *Laterallus albigularis* (Lawrence, 1861) | Finca Paulandia, Vereda Cruces, Filandia; Finca El Capitolio, Vereda Pueblotapao, Montenegro, and Finca La Cascada, Vereda Palermo, Quimbaya | March 2001, October 2006, and November 2006 | |
| *Bartramia longicauda* (Bechstein, 1812) | Road Cruces to Filandia, Filandia | 2001 | This record refers to an individual found dead on a road. |
| *Geotrygon linearis* (Prévost, 1843) | Finca La Rivera, Vereda Santana, Quimbaya and Finca Palermo, Vereda La Popa, La Tebaida | December 2008 and October 2009 | |
| *Megascops colombianus* (Traylor, 1952) | Bremen Natural Reserve, Filandia and near Rio Barbas, Filandia | 2006-2009 | recorded several times |
| *Pseudoscops clamator* (Vieillot, 1815) | Armenia city | 2006-2010 | recorded several times |
| *Nyctibius maculosus* (Ridgway, 1912) | Acaime Natural Reserve, Salento | 1998 | |
| *Lurocalis semitorquatus* (Gmelin, 1789) | Bremen Natural Reserve, Filandia | | |
| *Uropsalis lyra* (Gmelin, 1789) | Acaime Natural Reserve, Salento | 1998 | |
| *Eutoxeres aquila* (Bourcier, 1847) | Finca Santa Lucia, Vereda Guaymaral, Quimbaya | December 2006 | |
| *Anthocephala floriceps* (Gould, 1854) | Las Torres, Calarcá and Bremen Natural Reserve, Filandia | March 2004 and November 2007 | |
| *Campylopterus falcatus* (Swainson, 1821) | Bremen Natural Reserve. Filandia | March - June 2009 | |
| *Contopus cinereus* (Spix, 1825) | Finca Paulandia, Vereda Cruces, Filandia and Finca La Balastrera, Vereda La Julia, Filandia | October 2004 | |
| *Colonia colonus* (Vieillot, 1818) | El Ocaso Natural Reserve, Quimbaya | April 2002 and 2006 | Regular records during 2006 |
| *Machaeropterus regulus* (Hahn, 1819) | Quebrada Pavas, Vereda Pavas, Filandia | Enero 2001 | |
| *Pachyramphus albogriseus* (Sclater, 1857) | El Ocaso Natural Reserve, Quimbaya | April 2002 | |
| *Cyphorhinus thoracicus* (Tschudi, 1844) | Finca Lusitania, Vereda Cruces, Filandia | November 2003 | |
| *Turdus grayi* (Bonaparte, 1838) | Finca El Encanto, Vereda La Soledad, Córdoba; Finca Buenos Aires, Vereda Calabria. Quimbaya; and Finca Palermo, Vereda La Popa, La Tebaida | October 2008, May 2009, and October 2009 | |
| *Eucometis penicillata* (Spix, 1825) | Finca El Encanto, Vereda La Soledad, Córdoba | October 2008 | |
| *Tiaris obscurus* (d'Orbigny and Lafresnaye, 1837) | Finca Lusitania, Vereda Cruces, Filandia; Finca La Cascada, Vereda Palermo, Quimbaya; Finca El Encanto, Vereda La Soledad, Córdoba; and Finca Palermo, Vereda La Popa, La Tebaida | November 2003, October 2008, and October 2009 | |
| *Oryzoborus angolensis* (Linnaeus, 1766) | El Ocaso Natural Reserve, Quimbaya | April 2002, 2006 | Regular records during 2006 |
| *Cacicus cela* (Linnaeus, 1758) | Finca El Capitolio, Vereda Pueblotapao, Montenegro and Finca Palermo, Vereda La Popa, La Tebaida | October 2006 and October 2009 | |

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**Literature Cited**


Arango-Cano, J. 1977. *Geografía física y económica del Quindío*. Armenia: Lito-editorial Quingraficas. 136 p.

Arbeláez- Cortés, E. 2007. Registro fotográfico de algunas especies de la avifauna de la Reserva Natural "La Patasola", Quindío, Colombia. *Boletín SAO* 17(2): 149-163.

Arbeláez-Cortés, E. and O. Baena-Tovar. 2006. Primer registro del Azulejo de Wetmore (*Buthraupis wetmorei*, Thraupinae) para el Quindío, Andes centrales de Colombia. *Ornitología Colombiana* 4: 78-81.

Arbeláez-Cortés, E., O.H. Marín-Gómez, O. Baena-Tovar and J.C. Ospina-González. 2011. Aves, Finca Estrella de Agua – Páramo de Frontino, municipality of Salento, Quindío, Colombia *Check List* 7(1): 64-70.

BioMap Project / Darwin Database. 2003. *Distribution database of Colombian avifauna by the Natural History Museum, Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Conservation International, and American Museum of Natural History*. Electronic Database accesible at http://www.biomap.net. Captured on 15 May 2009.

BirdLife International. 2009. *Data zone, species information*. Electronic Database accesible at www.birdlife.org. Captured on 25 August 2009.

Brooks, T.M., S.L. Pimm and J.O. Oyugi. 1999. Time lag between deforestation and bird extinction in tropical forest fragments. *Conservation Biology* 13(5): 1140-1150.

Chapman, F.M. 1912. Diagnoses of apparently new Colombian birds. *Bulletin of the American Museum of Natural History* 31: 139-166.

Chapman, F.M. 1914a. Diagnoses of apparently new Colombian birds II. *Bulletin of the American Museum of Natural History* 33: 167-192.

Chapman, F.M. 1914b. Diagnoses of apparently new Colombian birds III. *Bulletin of the American Museum of Natural History* 33: 603-637.

Chapman, F.M. 1915. Diagnoses of apparently new Colombian birds IV. *Bulletin of the American Museum of Natural History* 34: 635-662.

Chapman, F.M. 1917. The distribution of bird-life in Colombia; a contribution to a biological survey of South America. *Bulletin of the American Museum of Natural History* 36: 1-729.

Chapman, F.M. 1921. Descriptions of proposed new birds from Colombia, Ecuador, Peru, and Brazil. *American Museum Novitates* 18: 1-12.

Chapman, F.M. 1923. Descriptions of proposed new birds from Venezuela, Colombia, Ecuador, Peru, and Chile. *American Museum Novitates* 96: 1-12.

Chapman, F.M. 1925. Descriptions of new birds from Colombia, Ecuador, Peru, and Argentina. *American Museum Novitates* 160: 1-14.

CRQ (Corporación Autónoma Regional del Quindío) and IAvH (Instituto Alexander von Humboldt). 2003. *Conocimiento, conservación y uso sustentable de la diversidad biológica*. Armenia: Optigraf. 158 p.

Cuervo, A.M., C.D. Cadena, N. Krabbe and L.M. Renjifo. 2005. *Scytalopus stilesi*, a new species of tapaculo (Rhynocryptidae) from the Cordillera Central of Colombia. *Auk* 122(2): 445-463.

Diamond, J.M. 1987. Extant unless proven extinct? or, extinct unless proven extant?. *Conservation Biology* 1(1): 77-79.

Duque, D. 2005. *Guía de aves acuáticas Rio La Vieja*. Armenia: Printec. 60 p.

Fjeldså, J. and N. Krabbe. 1990. *Birds of the high Andes*. Svendborg: Zoological Museum University of Copenhagen and Apollo Books. 876 p.

Hilty, S.L. and W.L Brown. 1986. *A Guide to the Birds of Colombia*. Princeton: Princeton University Press. 836 p.

Holton, I.F. 1981. *La Nueva Granada: veinte meses en Los Andes*. Bogotá: Ediciones del Banco de la República. 635 p.

Humbolt, A. 1814. *Researches concerning the institutions and monuments of the ancient inhabitants of some of the most striking scenes in the cordilleras. Volume 1*. London: Longman, Hurst, Rees, Orme & Brown, J. Murray & H. Colburn.

Isler, M.R. and P.R. Isler. 1987. *Tanagers: Natural history, distribution, and identification*. Washington: Smithsonian Institution Press. 404 p.

Marín, O.H. 2005. Avifauna del campus de la Universidad del Quindío. *Boletín SAO* 15(2): 42-60.

Marín-Gómez, O.H. 2007. Visitas de "Aves insectívoras" al guamo, *Inga edulis* (Mimosoideae) en el departamento del Quindío, Colombia. *Boletín SAO* 17(1): 39-46.

Marín-Gómez, O.H. 2009. Fotografías de algunas especies de aves del AICA Barbas-Bremen. *Boletín SAO* 19(1&2): 38-50.

Meyer de Schauensee, R. 1948. The birds of the Republic of Colombia (primera parte). *Caldasia* 5(22): 251-379.

Meyer de Schauensee, R. 1949. The birds of the Republic of Colombia (segunda entrega: Accipitridae - Picidae). *Caldasia* 5(23): 381-644.

Meyer de Schauensee, R. 1950. The birds of the Republic of Colombia (tercera entrega: Dendrocolaptidae - Tyrannidae). *Caldasia* 5(24): 645-871.

Meyer de Schauensee, R. 1951. The birds of the Republic of Colombia (cuarta entrega: Alaudidae - Fringillidae). *Caldasia* 5(25): 873-1112.

Paynter, R.A. 1997. *Ornithological gazetteer of Colombia*. Cambridge: Museum of Comparative Zoology Harvard University. 537 p.

Remsen, J.V. Jr., A. Jaramillo, M. Nores, J.F. Pacheco, M.B. Robbins, T.S. Schulenberg, F.G. Stiles, J.M.C. da Silva, D.F. Stotz and K.J. Zimmer. A. 2010. *Classification of the bird species of South America*. American Ornithologists' Union. Electronic Database accesible http://www.museum.lsu.edu/~Remsen/SACCBaseline.html. Captured on 10 February 2010.

Renjifo, L.M. 1991. Discovery of the Masked Saltator in Colombia, with notes on its ecology and behavior. *Wilson Bulletin* 103(4): 685-690.

Renjifo, L.M. 1994. First records of the Bay-vented Cotinga *Doliornis sclateri* in Colombia. *Bulletin British Ornithologists' Club* 114(2): 101-103.

Renjifo, L.M. 1999. Composition changes in a subandean avifauna after long-term forest fragmentation. *Conservation Biology* 13(5): 1124-1139.

Renjifo, L.M. 2001. Effect of natural and anthropogenic landscape matrices on the abundance of subandean birds species. *Ecological Applications* 11(1): 14-31.

Renjifo, L.M., A.M. Franco, J.D. Maya, G.H. Kattan and B. López-Lanús. 2002. *Libro rojo de Aves de Colombia. Serie libros rojos de especies amenazadas de Colombia*. Bogotá: Instituto de Investigación de Recursos Biológicos Alexander von Humboldt y Ministerio del Medio Ambiente. 562 p.

Restall, R., C. Rodner and M. Lentino. 2006a. *Birds of Northern South America: an identification guide.* Volume 1. New Haven: Yale University Press.

Restall, R., C. Rodner and M. Lentino. 2006b. *Birds of Northern South America: an identification guide.* Volume 2. New Haven: Yale University Press. 656p.

Ridgely, R.S. and G. Tudor. 1989. The *Birds of South America: The Oscine Passerines.* Volume I. Austin: University of Texas Press. 596 p.

Ridgely, R.S. and G. Tudor. 1994. *The Birds of South America: The Suboscine Passerines*. Volume II. Austin: University of Texas Press. 814 p.

Ridgely, R.S. and P.J. Greenfield. 2001. *The birds of Ecuador: Status, distribution, and taxonomy*. New York: Cornell University Press. 768 p.

Rivera-Pedroza, L.F. and M.P. Ramírez. 2005. Una extensión de la distribución del Tororoi Medialuna *Grallaricula lineifrons* (Formicariidae) en Colombia. *Ornitología Colombiana* 3: 81-83.

Stiles, F.G. 1998. Las aves endémicas de Colombia; p. 378-385 and 428-432. *In* M. E. Cháves and N. Arango (ed.). *Informe nacional sobre el estado de conservación de la biodiversidad*. Tomo I. Bogotá: Instituto de Recursos Biológicos Alexander von Humboldt, PNUMA y Ministerio del Medio Ambiente.



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