NOTA

NEW RECORDS OF MAMMAL AND BIRDS FOR BARLOVENTO REGION, STATE OF MIRANDA, NORTHERN VENEZUELA

NUEVOS REGISTROS DE MAMIFEROS Y AVES PARA LA REGION DE BARLOVENTO, ESTADO MIRANDA, VENEZUELA

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Barlovento Region is located at approximately 100 Km E Caracas (9° 55'-10° 40' N, 65° 25'-66° 35' W). Average annual temperature varies between 25 and 28 °C and the total rainfall between 1.800 and 2.400 mm in the interior zone. In the coastal zone, average temperature is 26 °C and the total rainfall 898 mm. The predominant vegetation is tropical humid forest, tropical very humid forest and premontane very humid forest in the interior range, whereas in the coastal range is tropical dry forest (Ewel et al., 1976).

The composition and diversity of the wildlife of Barlovento is known from the paper of Cordero (1987) on the terrestrial vertebrate fauna of the region, and papers of Eisenberg et al. (1979) and Ochoa et al. (1995) on mammals, and Morton (1979) on birds for Guatopo National Park. Cordero (1987) recorded 120 mammalian, 312 avian, 66 reptilian, and 18 amphibian species in his report. At that time, he only reported two species of small wild cats, Leopardus (Felis) pardalis (ocelot) and Herpailurus (Felis) yagouaroundi (jaguarundi), three species of ducks and three species of pigeons.

In this paper we are reporting new records of Leopardus (Felis) wiedii (margay), Cairina moschata, and Columba corensis for Barlovento Región and Miranda State.

On August 7, 1984 while conducting a field survey for one of us (GACR) E. Pannier and J. Naveda collected a male of a small wild spotted cat in a tropical humid forest within the Rio Negro Agriculture Experiment Station, Simón Rodríguez University 30 Km NE Caucagua, Municipio Acevedo. The elevation of the site is 40 to 70 m. The wild cat was climbed over a fallen rotting log when he was shot at 22:00 hours. Unfortunately, only the skull was preserved and no external body measurements or mass were taken. The specimen was deposited as Felis pardalis in the mammalian collection of the Museo de Biología, Central University of Venezuela, and assigned catalogue number MBUCV-03793. However, after the publication of Cordero's (1987) paper we realized that the specimen was really the margay (Leopardus wiedii) when Prof. Edgardo Mondolfi was examining the small wild cat collection.

On March 24, 1991 the first author had the opportunity to take external body measurements and mass of a female margay hunted in a tropical humid forest by a peasant at "Fila La Esperanza" in the proximity of Merecure village 7.3 Km NE Caucagua. The elevation of the site is 500 m. The female margay was standing on a fallen rotting log when it was shot at 03:05 hours. Just before the shooting the small cat was meowing, suggesting that it had already detected the hunter. Unfortunately, the peasant kept for himself the cat skull and skin. We analyzed the content of the cat stomach that was completely full. The cat had recently eaten an adult lactating female of the spiny pocket rat (Heteromys anomalus), known locally as "ratón mochilero"; and one adult and two nestling passerine antbirds (Passeriformes: Formicariidae, Thamnophilinae). The body of one of the nestling was found altogether in one piece. It

seems that the cat swallowed the nestling without even chewing it. Several carrion fly larvae (Diptera: Muscidae and Sarcophagidae) were found, suggesting that preys were either dead or infected when taken. None of the preys showed signs of decomposition, suggesting the infection by larvae. Also, a female nematode worm (*Physaloptera* sp.) was found. The body measurements and mass of the cat are: 1.010 mm total length, 420 mm tail length, 140 mm hind foot, and 3400 g.

Actually, the number of felids species found in Barlovento is five. Leopardus wiedii (Carnivora: Felidae) is found south of Orinoco River, the Andes Cordillera, Maracaibo Lake, Coriano System and the central Cordillera between 100 and 860 m (Bisbal, 1992; Linares, 1998). The two new locations of capture reported in this paper confirm the presence of the margay in the interior range of Barlovento. Bisbal (1990) reported the capture of this species by some foreign museum in "Los Totumos", State of Miranda. Los Totumos is located 4 Km N Carenero town and 8 Km NE Higuerote town in the coastal range of the region.

In Barlovento region, both *L. pardalis* and *L. wiedii* are called "cunaguaro". Rural people hunt cunaguaros for their meat and pelts. Charms collars are prepared with their incisors and claws, whereas their fat is used to prepare remedies to relieve rheumatic pains and headaches (Cordero, 1990).

While on a survey raid in the Barlovento region on June 1 (1997), one of us (RBA) sighted a flock of 30 muscovy duck, Cairina moschata (Anseriformes: Anatidae) early in the morning (06:00 to 08:00 a.m.) and late in the afternoon from 16:00 to sunset The flock was spotted flying over "Potrero Rubino" swampy-lagoon located 5.5 Km NE El Clavo town, Municipio Acevedo. The ducks were observed perching in the forest areas. At some point in time, they took off flying mostly in pairs in north-south direction and landed on the lagoon water surface in vegetation free areas. A reproductive active female muscovy duck was gunned down. On the same day, approximately 500 whistling ducks (Dendrocygna autunnalis) were also sighted flying over in separate flocks of 15 to 20 individuals. The ducks landed either on the lagoon water surface to forage food or on a

defoliated tree located on the eastern shore. Cordero (1987) reported the latter species previously. Also, it is quite possible that the muscovy duck and another whistling duck species, *Dendrocygna viduata* are found in the wetlands of the Laguna de Tacarigua National Park located in the coastal zone of the region (10° 09'-10° 19' N, 65° 40'-65° 49' W). If we confirm the presence of *D. viduata* in the park, it would mean that there are five species of ducks in Barlovento.

The Potrero Rubino wetland is a seasonal lagoon whose filling and drainage dynamics is modeled by the region rainfall pattern, the water of several streams flowing into it, and the occasional flooding of the Tuy River located 8 Km to the south of this lagoon. This lagoon encompasses an area of approximately 1600 ha which is surrounded by forest vegetation in the north, east, and west and by forest vegetation and citric abandoned fields in the south. There are several isolated forest patches within the wetland. Trees highth is approximately 20 to 25 m. The dominant trees are "samán" (Pithecellobium saman) and "apamate" (Tabebuia rosea), and a palm known as "chaguaramo" (Reystonea regia). The most common aquatic plants found in the area are members of the Poaceae family. Also, Ludwigia sp. (Onagraceae), Montichardia arborescens (Aroccae), Eichhornia crassipes (Pontederiaceae) and the fern Salvinia sp. (Salviniaceae) are common (E. Gordon, pers. communication 1999).

In Venezuela, the muscovy duck is called "pato real". Its distribution range includes the Llanos region, States of Amazonas, Bolivar, Delta Amacuro, Sucre, and the southern region of Maracaibo Lake (Mondolfi, 1970, Gondelles-Amengual et al., 1981). In some areas of the Llanos is disappearing due to poaching and deforestation, whereas in the Valencia Lake Basin is locally extinct, and in the Maracaibo Lake Basin is endangered due to deforestation (Gondellles-Amengual et al., 1981). We consider that our finding represents the only record for the Coastal Range region and an extension of its distribution range in Venezuela. Gómez-Dallmeier and Cringan (1989) in their book on the waterfowl of Venezuela include the global and Venezuelan distribution of muscovy duck (Figure 21, p. 185). The Barlovento region and the State of Miranda are both included in the latter distribution. However, neither of them has conducted research on muscovy duck biology in Venezuela. We wonder where their information comes from because they have not indicated the source of it. In Barlovento region, the muscovy duck is hunted for meat and some farmers raise it as poultry fowl alone with domestic duck and chicken.

On June 30, 1997 the second author was walking along the beach at "Los Totumos" Bay and sighted several individuals of the bare-eyed pigeon, Columba corensis (Columbiformes: Columbidae) during late afternoon from 16:00 to 18:30 hours. Pigeons were seen flying along the shore of the bay heading north south or south north toward the tropical dry forest and xerophytic vegetation. Some pigeons were flying over the sea at about some 20 m from the coast and others flying over forest patches of mangroves. These mangroves are located some 50 m from the coast, bordering several salty marshlands. The pigeon flight was about 15 to 20 m high. At this highth, C. corensis can be easily identified focusing on the white feathers of the wings. Los Totumos Bay is located 4 Km N Carenero town, Municipio Brion.

The bare-eyed pigeon is called "paloma ala blanca" in Venezuela. It is found in the States of Lara, Falcón, northeastern Guárico, central Anzoateguí and Monagas, and Margarita Island (Meyer de Schauensee & Phelps, 1978). Our report represents an extension of its distribution range. The bare-eyed pigeon is hunted for meat in Barlovento and Venezuela.

Changes in land use as agriculture, cattle raising and construction of tourist and recreational facilities, and illegal subsistence hunting are the main threats for survival of wildlife in Barlovento. Licensed city hunters are a minority. None muscovy duck or pigeon were reported as gunned down by city hunters during the 1990-91 and 1991-92 Venezuelan sport hunting season (Babarro *et al.*, 1994). The margay is considered a game species in Venezuela. However, this small cat is under total protection because of its vulnerable status (Mondolfi, 1986; Linares, 1998). The IUCN Red Data Book lists it as vulnerable (Bisbal, 1992).

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