# Distribution Update

# Bush dog sighting in a large forest fragment in the Colombian Llanos



# Xyomara Carretero-Pinzón<sup>1</sup>

<sup>1</sup> Address for correspondence: Zocay Project, Cl 111 No. 45A-70 Apto 202 Int 5, Bogotá, Colombia. E-mail: xcarretero@gmail.com

Keywords: Bush dogs, Colombia, forest fragment, Llanos, Speothos venaticus.

#### **Abstract**

A pair of bush dogs *Speothos venaticus* was sighted in a large forest fragment (1,050ha) of Los Llanos, a native tropical grassland plain. The sighting occurred during data collection for a long-term primate monitoring project (November 2008 to present) at the private Las Unamas Natural Reserve in San Martín, Meta, Colombia. On 10 January 2012, two individual bush dogs crossed a trail, which was being used as a transect in the primate study, at the edge of the forest fragment. Colouration and size differences between the two individuals were not evident and sex could not be determined. No vocalizations were heard before, during or after the sighting. This is an update on bush dog distribution in Colombia, 576km from the only published sighting at the El Tuparro National Natural Park, Vichada, Colombia.

The bush dog Speothos venaticus is a poorly studied, IUCN Near Threatened canid species that occurs in Central and South America (DeMatteo 2008, DeMatteo et al. 2011). In Colombia however, reports of this species are rare. There is only one published sighting of the species at the El Tuparro National Natural Park, Vichada, Colombia (Defler 1986; Figure 1), approximately 576km from the present study. This sighting was a group of seven individuals in an open area of "surales" (a savanna formation of grassy hummocks). The present report is of two individuals observed inside a lowland forest remnant surrounded by a combination of natural savannas and pastures (Figure 1). Confirmation of bush dog presence has proven difficult with traditional survey methods such as line transects and camera traps, possibly due to the bush dog's habits and low density (DeMatteo et al. 2004). This makes it difficult to confirm Speothos in its estimated distribution (DeMatteo et al. 2004; DeMatteo 2008). Here I report a sighting of a pair of bush dogs in a large forest fragment (1,050ha) in the Colombian Llanos. I also provide information on potential prey species and other carnivores present in the same area.

The sighting occurred during data collection for a long-term primate monitoring project (November 2008 to present) at the private Las Unamas Natural Reserve in the Colombian Llanos. This reserve is located in Las Pampas farm (3°34'51.93"N, 73°27'02.56"W; 350m asl), close to the town of San Martín, Meta, Colombia (Figure 2). San Martín has historically been a pastoralist town due to its natural savannas. Over the years, the savannas have been converted to pastures thereby fragmenting the natural landscape, especially around watercourses. Forest fragments present in the area are remnants of lowland forest several kilometres wide that were converted to pastures in the last century (Stevenson and Aldana 2008).

In recent years, palm oil plantations and petrol extraction have further fragmented the landscape. This is especially true of palm oil; the Meta department, which is the main producer of palm oil in Colombia, has a

major presence in the region (Castiblanco et al. 2013). Las Unamas Natural Reserve is one of the few areas near San Martín. Over the past 100 years it has been managed for livestock and timber extraction for farm use only (E. Enciso, pers. comm.).

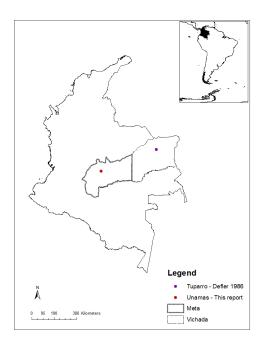


Figure 1. Location of bush dog sightings in Colombia.

The following is the established format for referencing this article: Carretero-Pinzón, X. 2013. Bush dog sighting in a large forest fragment in the Colombian Llanos. Canid Biology & Conservation 16(5): 16-17. URL: http://www.canids.org/CBC/16/bush\_dogs\_in\_Colombia.pdf

Carretero-Pinzón Bush dogs in Colombia

It is comprised of large (100–1,000ha) and extra-large (more than 1,000ha) forest fragments that are surrounded by pastures and two private natural reserves, Rey Zamuro and Matarredonda (Figure 2). The vegetation present in Las Unamas has elements of Amazonian and Orinoquia regions. Las Unamas had an annual precipitation of 2,177mm (average from 2004–2006), characterized by a wet season (April–November) and dry season (December–March) with an annual average temperature of 26°C (Carretero-Pinzón 2008). Illegal hunting has been observed inside and outside of all three reserves, especially during the dry season (X. Carretero-Pinzón, pers. obs.). Data for the primate monitoring project was collected through line transect surveys (Thomas et al. 2002). Other mammal species detected during these surveys were also recorded.

On 10 January 2012 at 0618hr during a line transect survey on an existing trail, two bush dogs crossed the trail 50m from the forest fragment edge and 200m from a small water course that crosses the savanna before joining to the main stream. Both animals were walking with their heads down as they emerged from the forest on the trail. They walked for a few minutes on the trail and, on detecting human presence, walked faster to the other side of the trail and disappeared into the forest. Colouration and size differences between the two animals were not evident but both individuals were adults. The sex of the animals could not be determined. No vocalisations were heard before, during or after the sighting.

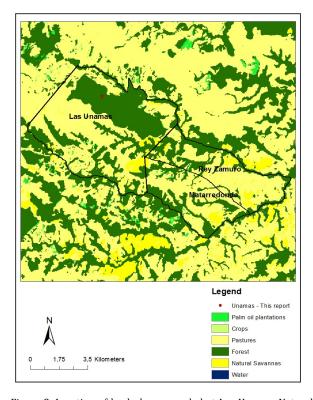


Figure 2. Location of bush dogs recorded at Las Unamas Natural Reserve.

A pilot study conducted in 2010 using camera traps inside Las Unamas did not find any evidence of bush dogs (E. Enciso pers. comm.). However, previous studies using camera traps reported low detectability of bush dogs due to the elusive habits of the species (DeMatteo et al. 2009; DeMatteo et al. 2011). Only one other sighting of this species in Colombia has been published (Defler 1986).

Other carnivores reported for Las Unamas from the primate project include felids such as jaguar *Panthera onca*, puma *Puma concolor*, ocelot *Leopardus pardalis*, margay *Leopardus wiedii* and oncilla *Leop-*

ardus tigrinus, and one canid, the crab-eating fox Cerdocyon thous. Potential prey species observed in this area include black agouti Dasyprocta fuliginosa, nine-banded armadillo Dasyprocta novemcinctus and spotted paca Cuniculus paca.

Exposure to disease from domestic dogs in the surrounding areas is a threat to the bush dog population (DeMatteo 2008), and this threat is further aggravated by illegal hunting with domestic dogs being common in the area. Due to limited knowledge of bush dog distribution in Colombia and the potential threats to the species, more effort to detect and evaluate wild populations of this species is needed in order to determine its conservation status in the country.

### Acknowledgements

The author is grateful to the Enciso family for their support and permission to conduct biological research at Las Unamas Natural Reserve, and Angelica Martinez for her collaboration in the field. Collection of ecological data was possible with private support (2004 to 2007). Idea Wild gave equipment for this and other projects during the past years. Work in 2009 and 2012 was supported by IEA Grants (Conservación Internacional – Colombia, Fundación Omacha and Fondo para la Acción Ambiental). P. Bal's comments helped to improve this manuscript.

# References

Carretero-Pinzón, X. 2008. Efecto de la disponibilidad de recursos sobre la ecología y comportamiento de *Saimiri sciureus albigena* en fragmentos de bosque de galería, San Martín (Meta – Colombia). MSc. Pontificia Universidad Javeriana.

Castiblanco, C. Etter, A and Aide, T.M. 2013. Oil palm plantations in Colombia: a model of future expansion. *Environmental Science and Policy* 27: 172–183.

Defler, T.R. 1986. A bush dog (*Speothos venaticus*) pack in the Eastern llanos of Colombia. *Journal of Mammalogy* 67 (2): 421 – 422.

DeMatteo, K. Carrillo, O. Zuercher, G.L. Ramirez, S. Smith, K. and Porton, I.J. 2004. A technique for attracting bush dogs *Speothos venaticus* in the wild. *Canid News* [online]. URL:

<a href="http://www.canids.org/canidnews/7/Attracting bush dogs.pdf">http://www.canids.org/canidnews/7/Attracting bush dogs.pdf</a> [Accessed 8 April 2013].

DeMatteo, K.E. 2008. Using a survey of carnivore conservationists to gain new insight into the ecology and conservation status of the bush dog. *Canid News* [online]. URL:

<a href="http://www.canids.org/canidnews/11/Bush dog data survey.pdf">http://www.canids.org/canidnews/11/Bush dog data survey.pdf</a> [Accessed 8 April 2013].

DeMatteo, K. Rias, M.A. Sede, M.M. Davenport, B. Argüelles, C.F. Lovett, K. and Parker, P.G. 2009. Detection dogs: an effective technique for bush dog surveys. *Journal of Wildlife Management* 73 (8): 1436-1440.

DeMatteo, K. Michalski, F. and Leite-Pitman, M.R.P. 2011. *Speothos venaticus*. IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2. URL: <a href="http://www.iucnredlist.org">http://www.iucnredlist.org</a> [Accessed 1 April 2013].

Thomas, L., Buckland, S., Burnham, K.P., Anderson, D.R., Laake, J.L., Breher, D.L. and Srindberg, S. 2002. Distance sampling. Pp. 544-552 in A.H. El-Shaarawi and W.W. Piegorsch (eds.), *Encyclopedia of Environmetrics*. Vol 1. John Wiley and Sons, New York.

## Biographical sketch

Xyomara Carretero-Pinzón is a Colombian biologist from Javeriana University with interests in the ecology, behaviour and conservation of primates and mammals in general. For the last eight years she has been studying primates in the Los Llanos region of Colombia.