

# **WESTERN RANGE EXTENSION (FROM NORTHEASTERN TO CENTRAL VENEZUELA) OF THE LONG-BEAKED COMMON DOLPHIN (*Delphinus capensis*)**

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## **ABSTRACT.**

Records of the long-beaked common dolphin (*Delphinus capensis*) in north-eastern Venezuela are abundant. Here, we present information on this species' presence in central Venezuela, based on two sightings made during cetacean surveys in the State of Aragua during July 2004 and June 2007. Bottom depth for the sightings was inshore of the 100 m isobath. The general area has been routinely surveyed since 1996, with no previous sightings of this species. Though these sightings confirm the occurrence of *D. capensis* in areas other than northeastern Venezuela, the scarcity of sightings relative to survey effort in central Venezuela suggests that the species is not a regular inhabitant of this area.

## INTRODUCTION.

Assessment of the status of common dolphins (*Delphinus spp.*) at a global level is considered a priority topic by the International Whaling Commission (IWC 2007, p. 37). Records of the long-beaked common dolphin (*D. capensis*) in northeastern Venezuela are abundant (Naveira 1996, Bermúdez-Villapol and Sayegh 2005; Molero 2005, Acevedo Galindo 2007, Estévez and Oviedo 2007); the species is considered resident to this region. The complex topography and bathymetry of this area and the enhanced productivity due to upwelling processes has been suggested to promote the occurrence of common dolphin populations in northeastern Venezuela (Roden and Mullin 2000; Acevedo-Galindo 2007; Estévez and Oviedo 2007). Groups are found regularly in the Mochima National Park, Gulf of Cariaco, around Margarita, Coche and Cubagua islands, Los Frailes Archipelago and off the peninsulas of Araya and Paria (Bermúdez-Villapol and Sayegh 2005, Molero 2005, Oviedo et al. 2005, Bolaños-Jiménez et al. 2006, Guada et al. 2006, Bolaños-Jiménez and Villarroel-Marín unpubl. data, Cobarrubia unpubl. data). A stranding outside this region was reported from Peninsula de la Guajira, near the Colombian border in 2002 (Ramírez-Carroz and González-Fernández 2004).

The presence of *Delphinus* in areas of complex topography (islands or submarine canyons) or upwelling zones in Venezuelan waters, near the mainland, and off islands and archipelagos in the southeastern Caribbean Sea was predicted by Acevedo-Galindo (2007). We present two records of free-ranging *D. capensis* in the central coast of Venezuela, approx. 250 km to the west of the species' known distribution range, yet in the area predicted by Acevedo-Galindo (2007).

## MATERIALS AND METHODS.

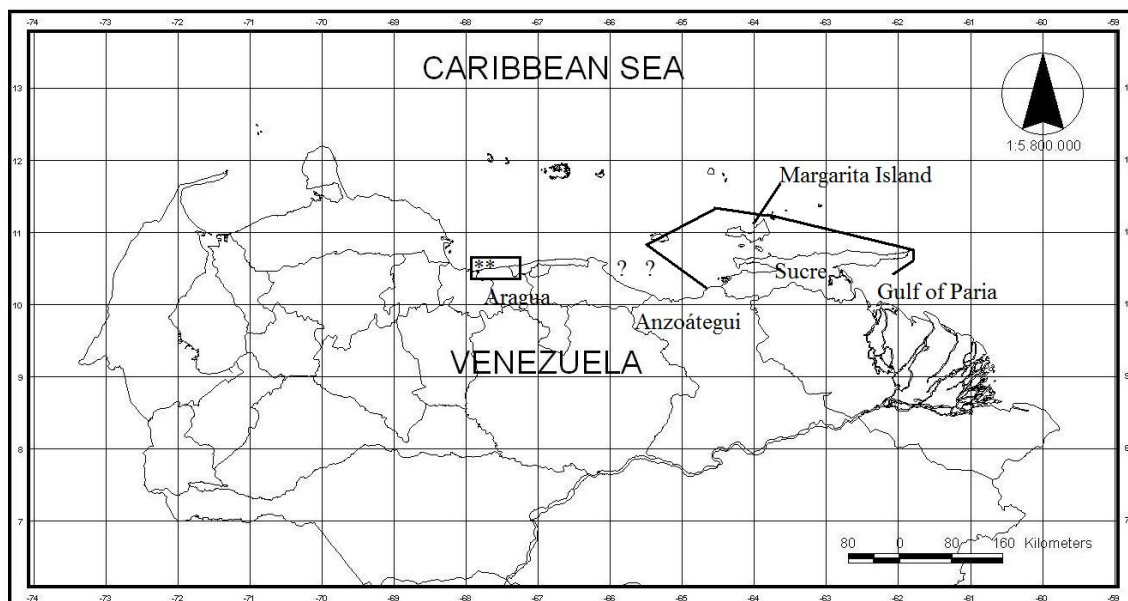
The study area is located in north-western Aragua, off the central coast of Venezuela, (Figure 1). In this area, according to the Nautical Chart DHN-300, the 200 m isobath runs parallel to the coastline at an average distance of 2-3 km from shore. Opportunistic and systematic cetacean surveys have been routinely conducted along this region since 1996 (Bolaños-Jiménez et al. 1998, 2007; González-Fernández 2000, Silva-Hernández 2007, Herrera-Trujillo 2007). The general methodology is described in Bolaños-Jiménez et al. (1998, 2007) and González-Fernández (2000).

## RESULTS AND DISCUSSION.

Both sightings were recorded by the senior author, who has been studying ecology and behavior of the sympatric species *Tursiops truncatus* and *Stenella frontalis* since 2004. The first sighting occurred on 18 July 2004 at coordinates 10°30' N, 67°46'W. Twenty-five individuals, including calves, juveniles and adults, were observed for 25 min. The second sighting was made on 22 June 2007 at coordinates 10°29'N, 67°48'W. The group was six individuals, all determined to be adults, which were observed for 13 min. Diagnostic characters observed clearly during both encounters were a tall, moderately

falcate dorsal fin; long beak, clearly demarcated from the melon, and crisscross colour pattern and thoracic patch as described for the long-beaked common dolphin by Heyning and Perrin (1994) and Perrin (2002). Both sightings were inshore of the 100 m isobath (Figure 1). No photographs are available for these sightings.

Although these sightings confirm the occurrence of *D. capensis* in areas other than northeastern Venezuela, the scarcity of sightings relative to survey effort in central Venezuela suggests that the long-beaked common dolphin is not a regular inhabitant of this area.



**FIGURE 1.** Map presenting the Western extension range of the distribution of the long-beaked common dolphin (*Delphinus capensis*) from northeastern to the State of Aragua, central Venezuela. The rectangle indicates the study area. \* = These sightings. The polygon indicates the known distribution area of the species in Venezuela according to available literature (see References) and unpublished sightings by both authors (see Acknowledgements).

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## REFERENCES

- Acevedo-Galindo, R. 2007. Potential distribution of seven species of marine cetaceans reported in Venezuela, Southeast Caribbean. *Acta Zoologica Sinica*, 58:853-864.
- Bermúdez-Villapol, L. A. & A. Sayegh. 2005. Informe técnico de varamientos de cetáceos en el estado Nueva Esparta, Venezuela, período 2000-2004. Informe Técnico del Centro de Investigación de Cetáceos (CIC), depositado en la Dirección Estatal Nueva Esparta, Ministerio del Ambiente, Isla de Margarita, Venezuela. (unpublished report).
- Bolaños J., M. Campo & M. González-Fernández. 1998. Estado actual de los cetáceos de las costas del Estado Aragua. Serie Informes Técnicos, Dirección General de Fauna/IT/386, Ministerio del Ambiente y de los Recursos Naturales (Hoy ONDB-MINAMB), Caracas, Venezuela. 41 pp.
- Bolaños-Jiménez, J., A. Villarroel-Marín, E. C. M. Parsons & N. A. Rose. 2007. Origin and development of whalewatching in the state of Aragua, Venezuela: Laying the groundwork for sustainability. Pages 16-27 in: Lück, M., A. Gräupl, J. Auyong, M.L. Miller & M.B. Orams, eds.. *Proceedings of the 5<sup>th</sup> International Coastal & Marine Tourism Congress: Balancing marine tourism, development and sustainability*. Auckland, New Zealand, September 11-15, 2007.
- Estéves, M. A. & L. E. Oviedo. 2007. Potential morphotype of common dolphin (*Delphinus* spp.) on the northeast coast of Venezuela. *Aquatic Mammals*, 33(2):229-234.
- González-Fernández, M. 2000. Determinación del estado actual de los cetáceos de la costa del Estado Aragua. Serie Informes Técnicos, resultados de la etapa II. Dirección General de Fauna. Ministerio del Ambiente y de los Recursos Naturales (Hoy ONDB-MINAMB). Caracas, Venezuela. 68 pp.
- Guada, H., M. Lentino, & J. Bolaños-Jiménez. 2006. Estudio de línea base ambiental de la fauna relevante (reptiles, aves y mamíferos) del área de la Plataforma Deltana, Atlántico Venezolano. Abstracts, VII Congreso de Ciencias del Mar (MARCUBA 2006), 4-8 December 2006, La Habana, Cuba (abstract only).
- Herrera-Trujillo, O. L. 2007. Efecto de la presencia de peñeros a motor sobre el comportamiento del delfín manchado del Atlántico (*Stenella frontalis*) y del delfín nariz de botella (*Tursiops truncatus*) en la costa del Estado Aragua. Tesis de Pregrado, Universidad Central del Venezuela. 86 pp.
- Heyning, J. E. and W. F. Perrin. 1994. Evidence for two species of common dolphins (genus *Delphinus*) from the eastern North Pacific. *Natural History Museum of Los Angeles County, Contributions in Science*, 442:1-35.

IWC (International Whaling Commission). 2007. Report of the Scientific Committee. Journal of Cetacean Research and Management, 9(Supplement):1-73.

Molero, A. 2005. Distribución y abundancia relativa de cetáceos en la ruta marítima Isla de Margarita-Cumaná. Tesis de Pre-Grado, La Universidad del Zulia.

Naveira, J. L. 1996. El Orden Cetacea en la región nororiental de Venezuela. Msc Thesis, Universidad de Oriente, . 181 pp.

Perrin, W. F. 2002. Common dolphins *Delphinus delphis*, *D. capensis* and *D. tropicalis*. Pages 245-248 in: Encyclopedia of Marine Mammals. W. F. Perrin, B. Würsig and J. G. M. Thewissen (Eds.). Academic Press, London, 1414 pp.

Oviedo, L., & N. Silva. 2005. Sighting frequency and relative abundance of bottlenose dolphins (*Tursiops truncatus*) along the northeast coast of Margarita Island and Los Frailes archipelago, Venezuela. Revista de Biología Tropical, 53(3-4), 595-600.

Oviedo, L., N. Silva, L. Bermúdez & D. K. Odell. 2005. Distribution of bottlenose dolphins (*Tursiops truncatus*) on the east coast of Isla Margarita and the Los Frailes Archipelago, Venezuela. Aquatic Mammals, 31(4):442-446.

Ramírez-Carroz, S. & M. González-Fernández. 2004. Primer registro del delfín común (*Delphinus capensis*: Gray, 1828) en el Golfo de Venezuela. Boletín del Centro de Investigaciones Biológicas, 38:140-149.

Roden, C. L. & K. D. Mullin 2000. Sightings of cetaceans in the northern Caribbean Sea and adjacent waters, Winter 1995. Caribbean Journal of Science, 36(3-4):280-288.

Silva-Hernández, M. G. 2007. Abundancia y distribución de los cetáceos presentes en el Estado Aragua. Tesis de Pre-Grado, Universidad Central del Venezuela. 100 pp.