

***Kogia* Distribution in the Northern Gulf of Mexico**

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In order to better understand the distribution of *Kogia* in the northern Gulf of Mexico, all available aerial and shipboard sighting records were compiled. Sources included the historical database analyzed in Jefferson and Schiro (1997), as well as shipboard and aerial surveys conducted by the Southeast Fisheries Science Center of the National Marine Fisheries Service (NMFS-SEFSC) and by Texas A&M University.

We compiled a total of 250 sightings (97 aerial and 153 shipboard). Sightings appeared to increase during spring through summer (April-September) reflecting an increase in sighting effort associated with NMFS-SEFSC marine mammal stock assessment surveys, which constitute the majority of the records. It should be noted that these surveys are performed during optimal sighting conditions (e.g., calm seas), and do not represent balanced seasonal coverage throughout any particular year.

It is difficult to identify *Kogia* to species level due to the similarity in appearance and cryptic behavior of both the pygmy and dwarf sperm whale. Seventy-six percent ($n=191$) of all *Kogia* sightings did not have species identity determined (**Figure 1**). *Kogia* predominantly occurred along, and seaward of, the continental shelf break (200 m isobath) (**Figure 1**).

Seventy-six percent ($n=189$) of the sightings were between the shelf break and the 2,000 m isobath; 46% of these ($n=87$) were on the upper continental slope between the 500 and 1,000 m isobaths (**Table 1**). Although there has been little survey effort seaward of the 3,000 m isobath, there are some sightings of individuals in those very deep waters. There is no evidence that *Kogia* regularly occur in continental shelf waters of the Gulf of Mexico (Davis et al. 2000), however, there were some sighting records in waters over the continental shelf (**Figure 1; Table 1**). The shallowest sighting occurred off the Florida Panhandle in waters with a bottom depth of 20 m (**Figure 1**).

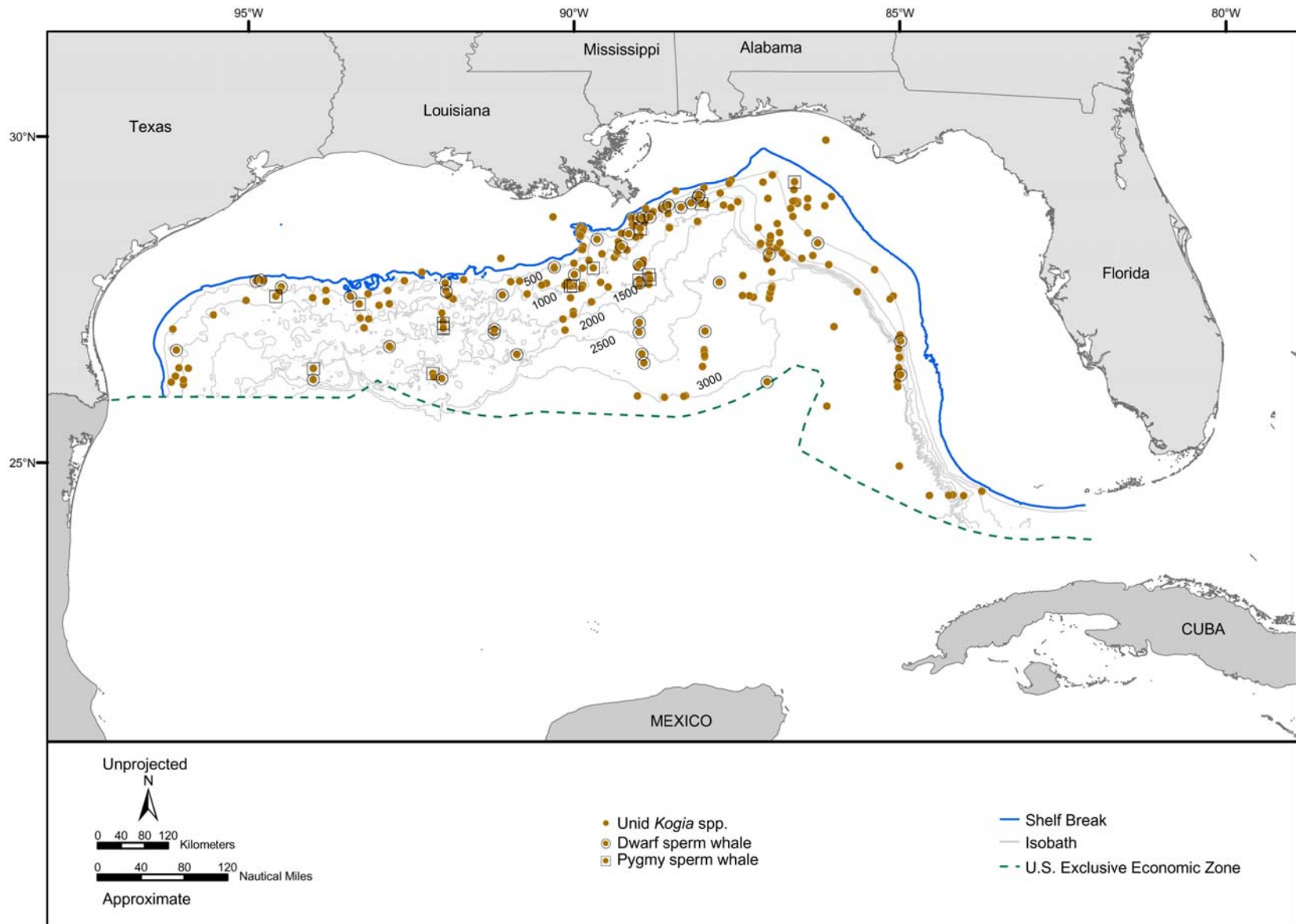


Table 1. *Kogia* distribution in the northern Gulf of Mexico relative to bottom depth.

Bottom depth (m)	Number of Sightings
0-200	4
200-500	43
500-1000	87
1000-1500	33
1500-2000	26
2000-2500	9
2500-3000	22
3000-3500	26
Total	250

There was a noticeable concentration of sightings in continental slope waters near the Mississippi River delta (**Figure 1**). The Mississippi River delta stands out as an important area for cetaceans in the northern Gulf of Mexico, as evidenced not only from recent survey efforts but also a review of historical records (Mullin et al., 1994; Jefferson and Schiro, 1997; Davis et al., 1998, 2002; Baumgartner et al., 2001). It is well known that oceanographic features are important factors determining cetacean distribution as their prey are attracted to the increased primary productivity associated with some of these features (Biggs et al., 2000; Wormuth et al., 2000; Davis et al., 2002). Baumgartner et al. (2001) suggested that *Kogia* may associate with frontal regions along the shelf break and the upper continental slope, since these are areas with high epipelagic zooplankton biomass, which is likely part of the diet of the common prey species of *Kogia*.

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