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Short Note

First Stranding of Sperm Whale (*Physeter macrocephalus*) in Korean Waters

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Strandings of live and dead cetaceans provide important local information regarding the presence, distribution, and migration of cetaceans (Klinowska, 1985; Malakoff, 2001). A bycatch/stranding reporting system for Korean waters was established in 1997 by the Ministry of Oceans and Fisheries (MOF) of Korea, and bycatch and stranding data have since been collected systematically. Detailed reports of all bycatch and stranding events are given by witnesses to the local marine police agent. Information such as location and date of bycatch or stranding events are then gathered by the marine police and reported to the MOF through the bycatch/stranding reporting system. This information is then analyzed by the Cetacean Research Institute for the purposes of effective conservation and management of cetaceans. The present report details the first stranding event of a sperm whale (*Physeter macrocephalus*)in Korean waters.

The stranding occurred on the northern shore of Ui Island (34° 36' 501" N, 125° 49' 192" E) on 2 December 2005 just off the southwestern part of the Korean peninsula (Figure 1). The sperm whale stranding site was on a gently sloping, sandy beach exposed to the open sea (Figures 1 & 2). The total area and coastline of this island are 10.7 km^2 and 21 km, respectively. The total body length and girth of the stranded sperm whale were 16 m and 8 m, respectively. Based on these measurements, the weight was estimated to be more than 35 tons. The protruding penis confirmed the individual to be male (Figure 2).

Although many researchers have sought to determine the cause of stranding events, most remain a mystery (Mignucci-Giannoni et al., 1999). Macleod et al. (2004) noted that identifying the cause of stranding events is nearly impossible. In this case, although decomposition was extensive, there was no clear evidence of external injuries associated with entanglement or ship strike. Whitehead et al. (1997) reported that the total body length of male sperm whales at sexual maturity ranges from 12.5 to 13.7 m. Thus, this stranded sperm whale was a mature male based on total body length; therefore, the cause of this stranding event may have been related to the natural mortality of an old individual.

Sperm whales are widely distributed globally from the tropics to the polar regions. Around Korean waters, they are found in the East Sea and the East China Sea (Park, 1987). A total of five sperm whales were caught by Japanese whaling boats in Korean waters between 1917 and 1937 (Park, 1987). One pod of eight sperm whales was observed in this area recently on 31 March 2004. However, there has been no documented bycatch of sperm whales in this area (Song, 2010; Song et al., 2010). Therefore, the sighting of a pod of sperm whales and a stranding event involving a sperm whale in Korean waters might imply that sperm whales are returning to their historical distribution and migration routes. More information regarding the distribution and migration pattern of sperm whales is needed to confirm this assumption, however, and will also contribute to effective conservation and management of sperm whales in this area.

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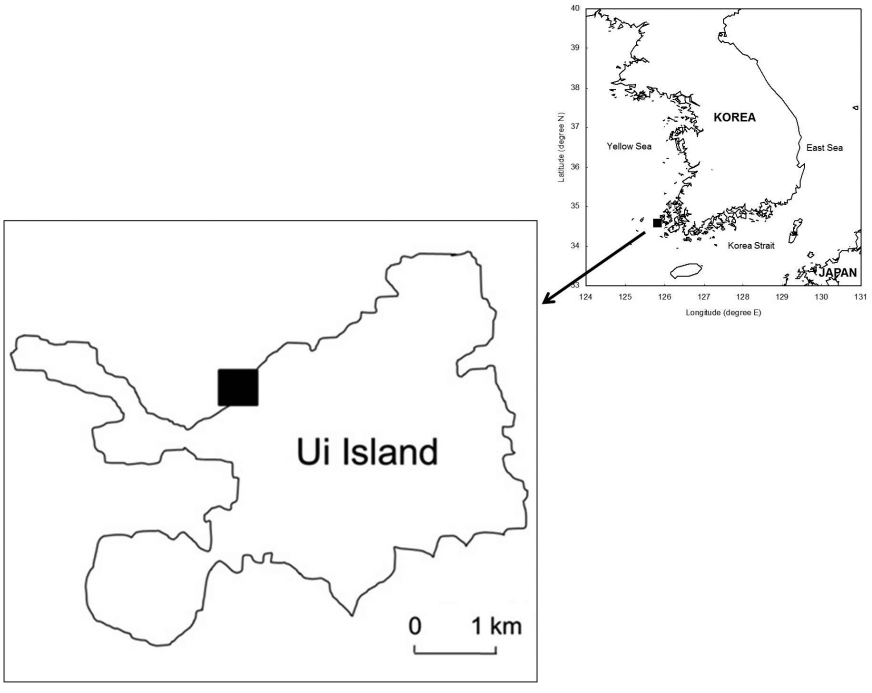

Figure 1. Study area and stranding site of sperm whale (*Physeter macrocephalus*) (square) in Korean waters.

Figure 2. Photograph of the stranded adult male sperm whale, with its massive squared head, in Korean waters on 2 December 2005; his protruding penis is visible on the sand midway between the head and the flukes.

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