Received:June,9.2009 Accepted: June,30.2009 Abstract

Dugong calls were collected using a towed stereo hydrophone system around Talibong Island and Muk Island in Thailand in January 2008. Standard visual observation was conducted simultaneously to record the dugong distribution. Total of 223 dugong calls and 80 dugongs were detected. Spatial distribution of both of the acoustical and visual detections were analyzed using I_{σ} index. The spatial distribution of the visual detections showed almost uniform distribution and that of the acoustical observations showed concentrated distribution (I_{σ} =0.85 and 3.18, respectively). The number of snapping noise per minute was less in the areas where dugong calls were observed (P < 0.001). It was suggested that dugongs vocalized selectively in less noisy areas.