Using parallel regional-and local-scale initiatives to inform conservation management of rare wildlife: A case study of the dugong Dugong dugon in Sabah, Malaysia

Abstract

Obtaining the information needed to inform management strategies for rare wildlife species at appropriate scales is costly and logistically demanding. Using coastal aerial surveys we obtained qualitative information on the distribution and abundance of the dugong Dugong dugon at the geopolitical scale of the state of Sabah in east Malaysia. At a local scale, interview surveys and a monitoring program were carried out at 2 sites: Mantanani Island and Banggi Island. A total of 53 dugongs were observed from the air, concentrated around Labuan Island-Brunei Bay and Sandakan Bay. The interview reports and monitoring program indicated that the residents of Mantanani Island and Banggi Island had local knowledge of the distribution and abundance of dugongs and, thus, an ability to participate in monitoring at that scale. Dugong populations in Sabah are small and clumped, and urgently require management intervention at local scales in the regionally important habitats identified by the aerial surveys. This combination of regional-and local-scale initiatives has a more generic application in the monitoring of other rare species of wildlife. © Inter-Research 2010.