フィリピン・ミンダナオにおけるジュゴンの保全とバナナ・プランテーション

Dugong conservation and human land use in Davao Gulf, Mindanao, Philippines

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This study evaluates the status of seagrass habitat, feeding habit of dugongs (*Dugong dugon*) and conservation efforts done in Davao Gulf, Philippines. Dugong visual observations, recording and SCUBA diving were conducted for six years (2003-2009) by researchers and local villagers. Dugong feeding trails were only found in *Halophila ovalis* beds, thus, the preferred food of dugongs. Feeding rate increased in dry season and fluctuated with lunar cycle. It was estimated that one individual dugong feeds only about 0.065% per day of the *H. ovalis* biomass and only 10% of the annual production. Previous knowledge of dugong feeding rates may be overestimation which was based on short-term observations. However, recent observations on the rapid loss of *H ovalis* beds threaten existence of dugongs in Davao Gulf. Seagrass beds are now endangered by high sedimentation and toxic chemicals coming from wide banana plantations upstream and other human activities. The loss of forests, soil, and degradation of water quality may result to loss of seagrass beds, including the dugongs. The results of this study confirm the importance of a landscape approach to conservation, integrating terrestrial and coastal management of resources.