Unskilled Diving as a Cause of Coral Deterioration: A Case Study of Koh Tao Island, Southern Thailand

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Koh Tao is a small island located approximately 70 km, east of Suratthani Province in the south of Thailand. It is well known amongst tourists visiting Thailand and is particularly popular for its diving. The dispersed reef around the island has deteriorated when compared to initial observations that were made in 1987. The deterioration seems to be associated with the increasing number of the tourists that have occurred in this same period, changing from 6,544 in 1987 to 57,086 tourists in 1997. A combination of skin divers' inexperience together with related socio-economic factors are thought to contribute to reef deterioration. Thus, in 1998, in order to test these suggestions, a survey of 300 tourists was conducted using questionnaires. A systematic scoring was assigned to knowledge, attitude and practice of the tourists' response concerning coral conservation in relation to skin diving activity. Pearson's product moment of correlation, t-test, ANOVA with Scheffe's test and stepwise multiple regression were adopted as the statistical methods used. It was found that by using the single factor test: age; length of stay; level of information received, and; knowledge, including attitude to coral conservation, were significantly associated with their practical diving habits. Also, knowledge, attitude and practice showed significant associations with each other. With regard to the multiple factor test, 5 out of 12 independent factors were derived from the model. These $(R^2 = 0.368)$. The included diving experience, attitude, dive training, age and nationality results indicated a number of recommendations, including environmental education that could be made to the implementing agencies responsible for reef conservation.