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Classification and quantification of marine debris from voluntary beach clean-up program at Pantai Peranginan Kelulut, Marang, Terengganu

Izan Jaafar, Nazaitulshila Rasit, Mohd Nizam Lani, Zainudin Bachok, Marinah Mohd Ariffin and Wan Izatul Asma Wan Talaat Universiti Malaysia Terengganu, Malaysia

The promotion of East Coast States in Malaysia wealth with their beautiful beaches has increased the number of visitors at the vicinity of beach area. However low awareness on the importance of beach protection from pollution and environmental awareness on protecting marine habitat, marine debris were continuously found hence endangered marine life and lessen the aesthetic value within beach spot. A voluntary beach clean-up program participated with more than 1000 people was conducted at Pantai Peranginan Kelulut Marang, Terengganu. The area had never undergone such program that involved public participation. The collection and quantification of marine debris for plastics, paper, glass, tin/aluminum, polystyrene and others (diapers, fishing equipment, etc.) was carried out in a brief 20 minutes along 1.8 km distance area which was divided into three main areas namely beach, park and restaurants, made up to 36 points. The program involved 41 undergraduates and postgraduate students of Universiti Malaysia Terengganu (UMT) as committee and facilitators. The total of massive 626 kg marine debris was collected. The classification demonstrated that diapers, sandals, beach balls, fishing equipment, etc. were the most abundant item, which were 315 kg represented 50% of total marine debris collected, the rest were plastic=132 kg (21%), glass=79 kg (13%), papers=42 kg (7%), polystyrene=34 kg (6%), Tin/Aluminum=24 kg (3%), respectively. Due to the high number of marine debris collected in that very short time, indicated that environmental awareness towards marine protection is still low, hence more such voluntary beach clean-up programs are highly needed to increase the environmental education among public and surrounding communities thus beach pollution can be lessen.

izanjaafar@umt.edu.my