

Litter assessment on 99 Cuban beaches: A baseline to identify sources of pollution and impacts for tourism and recreation

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Abstract

Litter presence was assessed on the entire Cuban coastline, and includes 99 beaches from all Cuban regions, during field work carried out in 2012 and 2015. A standard method verified in several countries was applied, which classified beaches for nine types of litter into four grades (A-excellent to D-poor). Almost half of the Cuban beaches obtained excellent cleanliness scores, although many needed to be better managed. In this baseline, the most common types of residue were general litter (8% grade D and 35% grades B/C) and potentially harmful litter (< 68% with grade A). Resort beaches and those with international visitors showed the best litter management. Tourism Impacts seems to be related to visitor origin therefore choices to develop sustainable tourism in rural and village beaches (64%) appears low, if beach cleaning gross investment is focused on resort beaches (24%). Finally, this paper highlights geographical distribution and types of litter patterns.

Keywords

Baseline, Beach cleanliness, Cuba, Litter, Sustainable tourism, Type of beaches