Grande Riviere Beach in Trinidad and Tobago is an important nesting site in the Caribbean for the Critically Endangered leatherback sea turtle, Dermochelys coriacea. Community members were concerned that beach erosion and seasonal river flooding were destroying many of the nests deposited annually and thought that a hatchery was a possible solution. Over the 2001 turtle nesting season, the Institute of Marine Affairs (IMA) assessed the spatial and temporal distribution of nests using the Global Positioning System recorded to reference points, and beach dynamics using permanent bench mark profile stations, to determine areas of high risk and more stable areas for nesting. A total of 1449 leatherback nests were positioned. It was evident that at the start of the season in March, the majority of leatherback nests were deposited at the eastern section of the beach. After May, there was a continuing westward shift in nest distribution as the season progressed until August and beach erosion in the eastern section became predominant. The backshore remained relatively stable along the entire beach throughout the nesting season, and erosion was predominant in the foreshore at the eastern section of the beach, from the middle to the end of the season. Similar trends in accretion and erosion were observed in 2000. River flooding did not occur during the study period or in the previous year. With both high risk and more stable regions for turtle nesting available at Grande Riviere Beach, there was no compelling evidence to justify the need for a hatchery.

Keywords
Leatherback turtle, beach dynamics, turtle nest distribution, community participation, Trinidad and Tobago.