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LEATHERBACK TURTLE *DERMOCHELYS CORIACEA* NESTING ALONG THE CARIBBEAN COAST OF COSTA RICA

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Abstract

Leatherback turtles have been studied intermittently along the Caribbean coast of Costa Rica since 1957 but continuous monitoring was not initiated until the 1990's. Leatherback nesting occurs along the entire coast and also on the Caribbean coasts of Colombia, Panama, Nicaragua and Honduras. Tagging studies have shown that movements of females between nesting beaches occur between nesting seasons (throughout the Honduras-Colombia range) and within the same nesting season (Costa Rica-Panama). Most monitoring and tagging studies in Caribbean Costa Rica have been conducted within three protected areas: Gandoca-Manzanillo Wildlife Refuge, Pacuare Nature Reserve and Tortuguero National Park. We estimate that 70 % of leatherback nests deposited along the Caribbean coast of Costa Rica are laid within these areas. Using number of nests deposited on monitored beaches (for years 1995-2000) as an index of total nests along the entire coast we estimate that between 2658-5191 leatherback nests are deposited yearly in Caribbean Costa Rica corresponding to 505-987 females/year. Comparison with other populations shows that the nesting aggregation of Caribbean Costa Rica is the fourth largest leatherback nesting population worldwide. The number of nests/year shows an average decline of 2.0 % per year over the study period. Killing of nesting females in northern Panama, egg poaching (probably approaching 100% outside protected areas), loss of habitat due to erosion and debris accumulation, and offshore oil exploration are the main challenges facing the nesting population. Priorities for leatherback conservation along the Caribbean coast of Costa Rica include: further monitoring to determine long-term trend in leatherback nesting, development of regional conservation initiatives, improved inter-organizational coordination and increased community participation.