Marine Debris Characterization of the Marquesas, Florida

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Marine debris has well-documented negative impacts on marine life, including abrasion, entanglement, entrapment, ingestion, and crushing. Previous studies conducted on Florida's Coral Reef have identified trap fisheries as the primary source of in-water marine debris in the Florida Keys, followed by non-trap fishing debris. However, these studies have not included reef areas west of Key West, particularly near the Marquesas Keys. This study presents preliminary findings of debris type, abundance, and density on benthic habitats west of Key West to Rebecca Shoal. Underwater debris removals were conducted by scuba divers in 2023, 2024, and 2025. The influence of reef rugosity, habitat type, and depth on debris was also assessed. Consistent with findings from other regions of the Florida Keys, our study indicates that the majority of marine debris in the Marquesas Keys is associated with trap fisheries, both in terms of abundance and the linear distance of line recovered.