# Determining the Geographic Origins of Endangered Scalloped Hammerhead Shark (Sphyrna lewini) Fins

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Millions of sharks are killed and traded annually to supply the market for shark fin soup, a luxury dish in Asia. In order to address the damage being done to shark populations by the international shark fin trade, data are needed regarding the origin of shark fins from prominent markets and traders. Genetic analysis is a useful tool in this endeavor as it can be used to determine the geographic origins of shark fins. In this study, mitochondrial control region sequences were used to determine the regional geographic origins of scalloped hammerhead shark (Sphyrna lewini) fins from the Hong Kong market. S. lewini populations are distributed globally and their fins receive high prices in the market, making them a heavily targeted species that is difficult to monitor. Approximately half of the samples did not amplify using standard primers most likely due to the poor quality of the DNA extracted from the heavily processed fins. In order to amplify these degraded samples, smaller internal control region primers were designed. Of the fins analyzed in this study, the largest number (32% of the samples) originated from the North East Pacific, suggesting the need for further conservation measures in this region. The methods used in this study, and the smaller internal control region primers designed, can potentially be applied to further assess and manage S. lewini and other shark species populations.

**Awards Won:**