

DNA Test Tracks Shark Catch

By Juliet Eilperin
Washington Post
Posted January 8 2006



Fins taken from great white sharks by illegal traffickers are being tracked by scientists using DNA testing in hopes of enforcing fishing regulations.

Photo Credit: J. Valetta

With genetic tests similar to those used by criminal investigators, federal law enforcement agents are identifying fins taken from imperiled great white sharks by illegal traffickers.

In late 2003, agents from the National Oceanic and Atmospheric Administration confiscated about one ton of dried shark fins that a New York City seafood dealer was planning to ship to Asian markets. The operation was outlined in an article in the January edition of the journal *Conservation Genetics*.

Scientists from the Guy Harvey Research Institute at Nova Southeastern University in Florida, working with federal agents, took tiny samples from 21 sets of fins using a novel and quick identification method that uses both nuclear and mitochondrial DNA markers. They ran the test after noticing that one of the confiscated sacks of fins was labeled "porbeagle," a close cousin of the great white shark that cannot be killed in U.S. waters under federal law, and another label hidden inside read "blanco," white in Spanish.

"The discovery of so many smaller shark fins from a highly protected species in the possession of a single trader indicates that there may be a specialized market for white shark fins not only as trophies but also food, putting additional pressure on the species," said principal author Mahmood S. Shivji, director of the Guy Harvey Research Institute. "By applying DNA techniques to track the species or origin of shark fins on the market, we can put 'teeth' into the enforcement of fishing regulations."

The case has not gone to trial; possessing or selling prohibited sharks species carries maximum fines of \$100,000.