Shark fins out of soup and into DNA test tubes

by Alex Lo
South China Morning Post - August 5, 2002

Shark fins bought in Hong Kong have been used by American geneticists to prove the effectiveness of DNA identification tests to help sound early alarms of overfishing of certain species.

The team, led by geneticist Mahmood Shivji, of the Guy Harvey Research Institute in Fort Lauderdale, Florida, aims to identify sharks most commonly sold on market and those possibly at risk.

Without DNA testing, the type of shark the fins are taken from is almost impossible to state with certainty.

"Preliminary testing of dried fins from commercial markets suggests our genetic approach will be useful for determining the [source of] detached fins, thus allowing the monitoring of trade in shark fins," the team wrote in Conservation Biology.

Hong Kong and China are the world's largest consumers of shark fins. The lucrative trade in shark-fin cartilage, used to make Chinese soup, accounts for the worldwide killing of an estimated 100 million sharks each year.

William Cheung Wai-lung, an assistant conservation officer with the World Wide Fund for Nature Hong Kong, said the global shark fin trade was largely unregulated.

"More effective international controls and conventions are in the pipeline and DNA tests would be needed to enforce bans or regulations on shark fishing in the future," he said.

About 75 Hong Kong fin samples, along with others brought from the Mediterranean, were used by the Florida team to test the accuracy of DNA identification of six varieties commonly found on the global fin market - the blue, dusky, porbeagle, silky, and long-fin and short-fin mako sharks.

Dr. Shivji told Nature magazine the team aimed to expand the DNA method to cover 35 species.

Sharks are more vulnerable than most fish to over-exploitation because their stocks do not easily bounce back. They take up to 10 years to reach maturity, have few young and long gestation periods.

Hong Kong imported 10.5 million kilograms of shark fins last year, according to government trade figures.

Quality fins sell for $3,000 to $4,000 a catty (605 grams), but top fins can cost much more.

For more information about the Guy Harvey Research Institute, or to make donations for FISH CONSERVATION RESEARCH:

Phone:(954)262-3605
Fax:(954)262-4098
Email: GHRI
Web site URL: http://www.nova.edu/ocean/ghri/