

Science, Service, Stewardship



Overview HMS Research Plan

September 28, 2010

**NOAA
FISHERIES
SERVICE**

NOAA



Overview HMS Research Plan - BFT

1) Systematic sampling program for the collection of biological samples

- Commercial Fisheries

Pelagic Observer Program

Port Sampling

- Recreational Fisheries

Large Pelagic Biological Survey (LPBS)



Overview HMS Research Plan - BFT

2) Biological Research

- *Stock Structure*

- Microchemistry of otoliths
 - Pollutants in fat tissue
 - Genetic tagging
 - Conventional tagging

- *Ageing*

- *Maturity*



Overview HMS Research Plan - SHK

1.- Biological and Ecological Research

- *Age and Growth*
- *Reproductive Biology*
- *Essential Fish Habitat and Migratory Patterns*
- *Trophic Studies, Foraging Ecology, Bioenergetics, and Ecosystem Modeling*

2. Development of Analytical Methodologies and Research Tools

- *Indices of Abundance*
- *Alternate stock assessment models*
- *Electronic tagging and acoustic technologies*



Overview HMS Research Plan - SHK

3. Fisheries Research

- *Modification of fishing practices*
- *Time-area closures*
- *Improvement in Monitoring of Shark Landings and Length / Age composition of the Catch*
- *Tagging*



Overview HMS Research Plan - BIL

1.- Biological and Ecological Research

- *Age and Growth*
- *Species identification*
- *Sex and maturity determination*
- *Habitat utilization*

2. Development of Analytical Methodologies and Research Tools

- *Fishery- independent indices of Abundance*
- *Alternate stock assessment models*
- *Electronic tagging*



Overview HMS Research Plan - BIL

3. Fisheries Research

- *Fishing Strategy and Gear Modification to Reduce Bycatch*
- *Improvement in Monitoring of BIL landings and Length / Age composition of the Catch*