

JIMAR ANNUAL REPORT FOR FY 2012

P.I. NAME: Trevor A. Branch

NOAA OFFICE (*Of the primary technical contact*): NMFS/PIFSC

NOAA SPONSOR (NOAA TECHNICAL LEAD) NAME : Samuel Pooley

PROJECT PROPOSAL TITLE:

Biological, economic, and management drivers of fishery performance: a global meta-analysis of tuna and billfish stocks

FUNDING AGENCY: NOAA

NOAA GOAL (*Check those that apply*):

- ☒ To protect, restore, and manage the use of coastal and ocean resources through ecosystem-based management
- ☐ To understand climate variability and change to enhance society's ability to plan and respond
- ☐ To serve society's needs for weather and water information
- ☐ To support the nation's commerce with information for safe, efficient, and environmentally sound transportation.
- ☐ Mission Support

PURPOSE OF THE PROJECT (*One paragraph*): *Include at least one objective.*

Collate all stock assessments of tuna and billfish species (marlin, swordfish, etc.), in order to understand the global status and trends of tuna and billfish species: trends in catches, biomass, stock status relative to fisheries reference points, and lost yield from overfishing and underfishing.

PROGRESS DURING FY 2012 (*One-two paragraphs*):

Include a comparison of the actual accomplishments to the objectives established for the period, along with reasons for the slippage if established objectives were not met.

Obtained data underlying stock assessments for all 35 assessed tuna and billfish stocks in the world. Analysed total biomass trends, total catch trends, estimated lost yield due to overfishing and underfishing, calculated current stock status relative to fisheries reference points. Prepare draft manuscript for publication.

PLANS FOR THE NEXT FISCAL YEAR (*One paragraph*):

Complete publication and submit to scientific journal (Proceedings of the National Academy of Sciences (USA))

**LIST OF PAPERS PUBLISHED IN REFERRED JOURNALS DURING FY 2012
OTHER PAPERS, TECHNICAL REPORTS, ETC.
PUBLICATION COUNT**

**complete excel attachment (JIMAR publications request)*

None.

GRADUATES:

Names of students graduating with MS or PhD degrees during FY 2012; Titles of their Thesis or Dissertation

None

AWARDS:

Name of JIMAR employees or project receiving award during the period, and Name of award

None

PERSONNEL *(on Subcontracts):*

For projects that awarded subcontracts in the fiscal year, please provide the number of supported postdocs and students from each subgrantee.

None

IMAGES AND CAPTIONS:

*We will also be including images for the annual report. Please send two of your best high-resolution, color images (photo, graphic, schematic) as a **JPEG or TIFF (300 dpi)** with a caption for each image. If you do not have an electronic version of the image, a hardcopy version may be dropped off at the JIMAR office located in the Marine Sciences Building, Room 312*

- Caption 1: Total biomass (t) of tuna and billfish stocks according to stock assessments (draft).
- Caption 2: Stock status of tuna and billfish stocks. The horizontal axis is biomass relative to the biomass that would produce maximum sustainable yield (MSY). The vertical axis is exploitation rate relative to the exploitation rate that would produce MSY. The size of the circles is proportional to MSY.

Caption 1: Total biomass (t) of tuna and billfish stocks according to stock assessments
(draft)



