



**NOAA**  
**FISHERIES**

Atlantic HMS

# Economic Contributions of Atlantic Highly Migratory Species Recreational Fisheries

## U.S. Atlantic and Gulf of Mexico

Clifford Hutt<sup>1</sup>, George Silva<sup>1</sup>, and Sabrina Lovell<sup>2</sup>

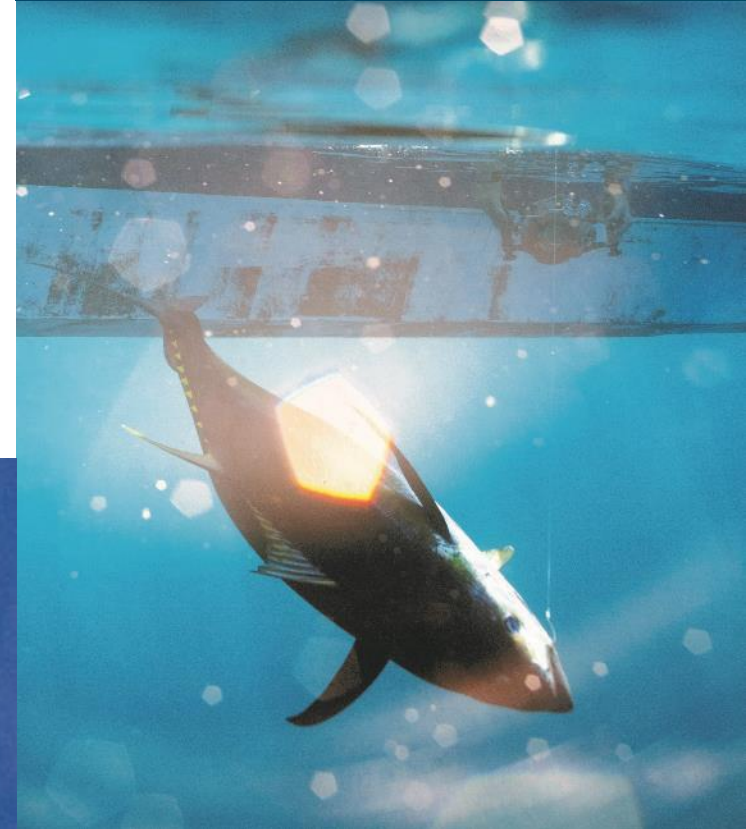
<sup>1</sup> NOAA Fisheries Office of Sustainable Fisheries

<sup>2</sup> NOAA Fisheries Office of Science and Technology

Presented at International Institute of Fisheries Economics and Trade  
Seattle, Washington – July 2018

# Introduction

- Highly migratory species (HMS) include tunas, sharks, billfish, and swordfish
- Managed by NMFS Atlantic HMS Management Division in U.S. federal waters of the Atlantic, Gulf of Mexico, and Caribbean
- ~24,000 recreational and for-hire vessels with HMS permits in 2017 and 282 registered HMS tournaments



# HMS Recreational Economic Studies

- Goal: Quantify the economic activity and impacts of recreational fishing participation and operations in Atlantic HMS fisheries
- Collected data on permit holder fishing expenditures and tournament operators on costs of hosting tournaments
- Estimates of total expenditures used to assess economic contributions in IMPLAN



Photo by Dr. John Graves



# Timeline of HMS Recreational Economic Data Collections

2013 – HMS For-Hire Cost-Earnings

2014 – HMS Angling Durable Expenditures

2016 – HMS Angling Trip Expenditures

2016 – HMS Tournament Study

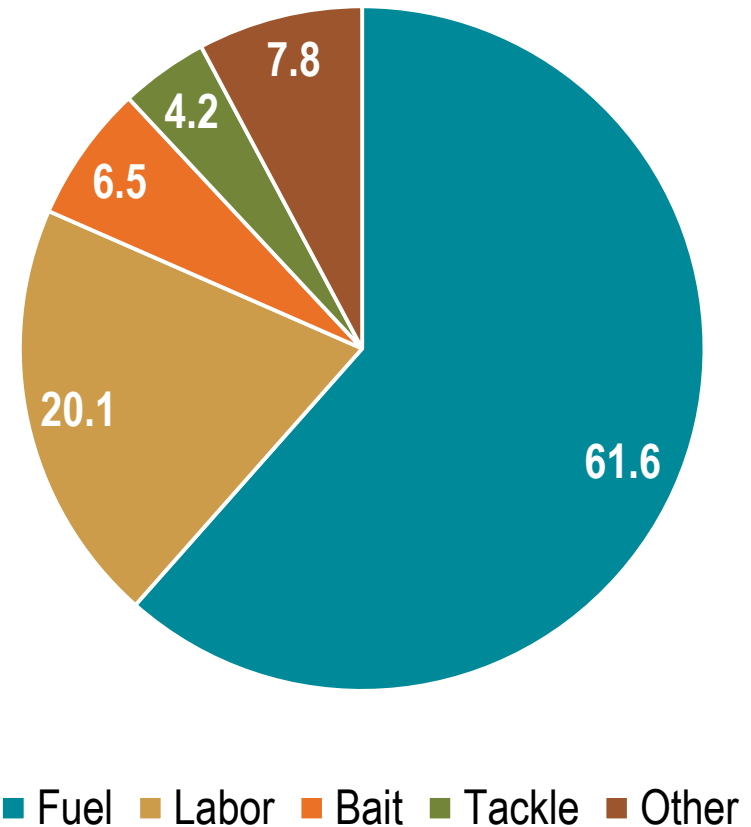


# 2013 HMS For-Hire Cost-Earnings Study

- Logbook study July - Nov 2013
- 536 unique trip reports
- Focused on trip costs and earnings, excluded fixed costs
- Estimated total costs for 9,449 trips

Category	Average	Total
Trip Revenue	\$2,062	\$18,951,000
Trip Costs	\$1,251	\$11,034,000
Net Return + Fixed Costs	\$811	\$7,917,000

**Costs and Earnings (%)**

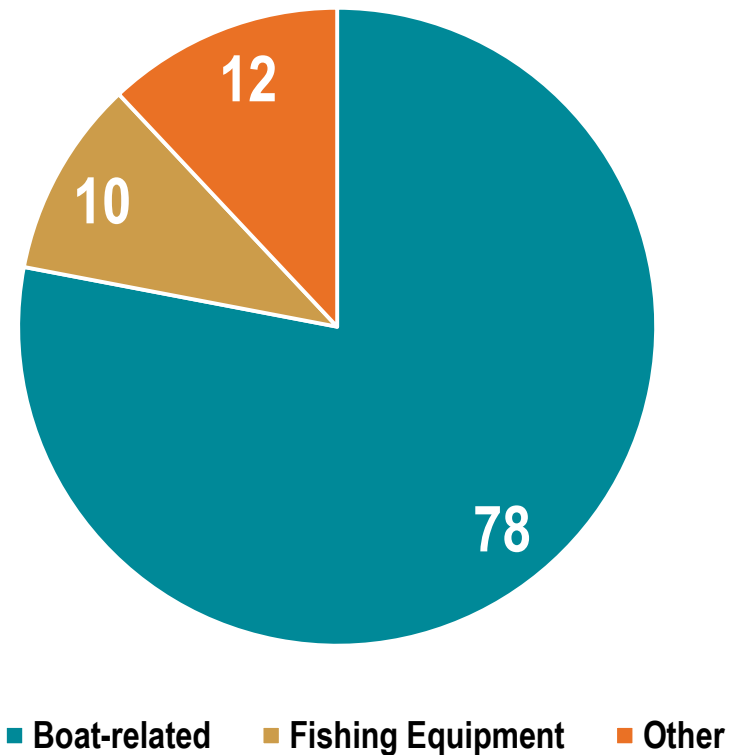


# 2014 HMS Angling Durable Expenditure Survey

- 2014 - 19,376 HMS Angling permits
- 2014 expenditures on durable goods – boats, vehicles, tackle, etc.
- **\$8,712 per permit holder**
- **\$168 million total expenditures**



## Durable Expenditures (%)

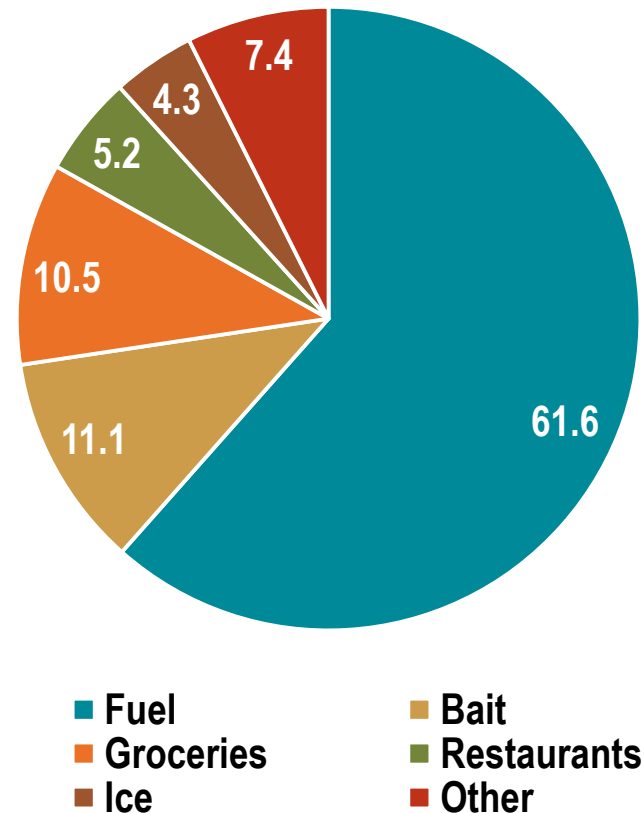


# 2016 HMS Angler Trip Expenditure Survey

- Surveyed in 2 month waves
- 1,784 completed returns for 37% response rate
- 53% of trips targeted tuna
- **\$683 average per trip**
- **\$46.7 million over 68K trips**



## Trip Expenditures (%)



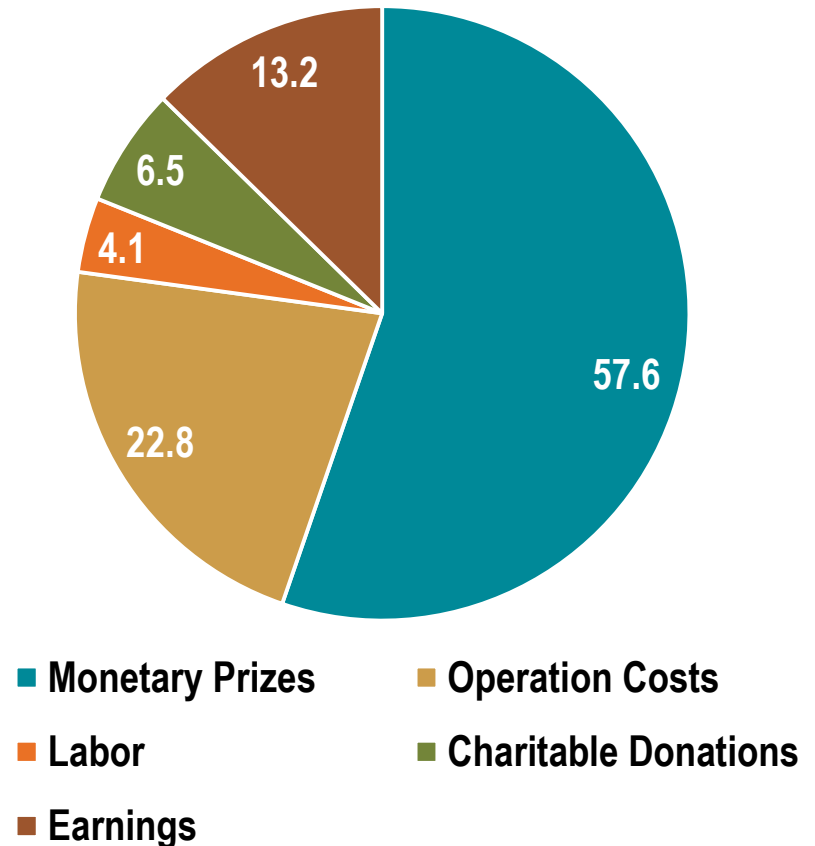
# 2016 Tournament Operator Costs and Earnings

- Surveyed 2016 tournaments
- 75 returns from 220 tournaments
- Marlin (60%) and yellowfin tuna (55%) top targets

Category	Average	Total
Revenue	\$175,468	\$38,427,000
Operating Costs	\$158,695	\$34,913,000
Net Earnings	\$16,046	\$3,514,000

Total = Average x 220 Tournaments

## Costs and Earnings (%)



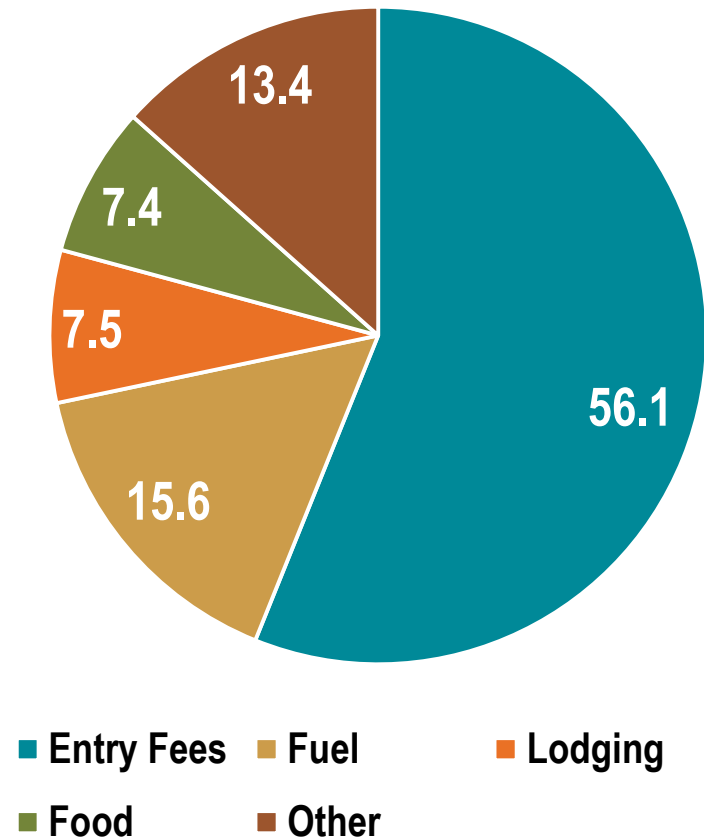


# Tournament Participating Team Expenditures

- Worked with tournament operators to solicit responses
- Randomly contacted half of tournaments - received data from teams in 27 tournaments
- **\$13,361 average per team**
- Estimated 7,304 teams in 2016
- **\$85.6 million total expenses**



## Team Expenditures (%)



# Economic Contribution Analysis

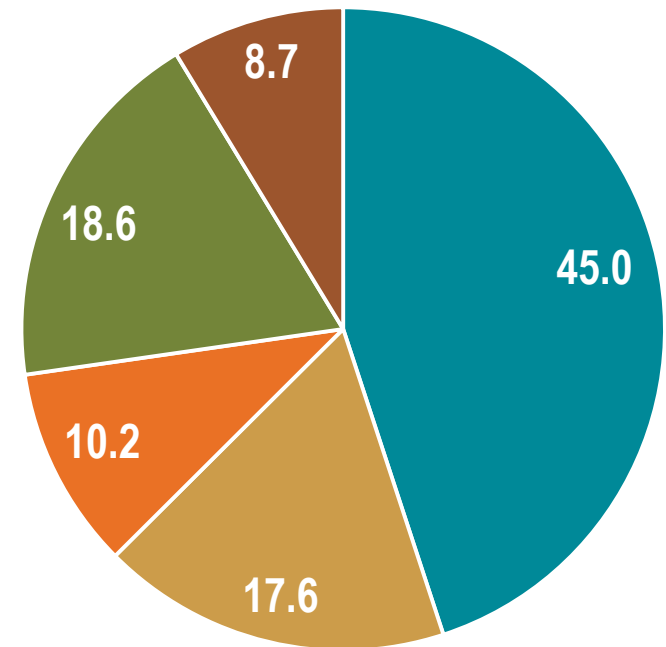
- Expenditures (Maine to Texas) associated with HMS recreational fishing were used to estimate total economic output, labor income, and employment in IMPLAN
- Total Output = Gross value of sales by businesses within the economic region that are supported by expenditures either directly or indirectly. Includes labor income.
- Labor Income = personal and proprietor's income supported by expenditures
- Employment = full and part time jobs supported by expenditures

# Economic Contributions of HMS Recreational Fishing

Impacts Category	Combined Estimates
Expenditures	\$307 million
Employment	4,528
Labor Income	\$191 million
Total Output	\$510 million



## Total Output (%)



- Durable Goods
- Angling Trips
- For-Hire
- Tour Teams
- Tour Operator

# Comparison to Other Saltwater Anglers

- 24,000 HMS recreational vessels per year
- Average ~\$12,800 in expenditures, \$21,250 in total output per year
- Compare to ~\$3,500/  
\$7,600 per saltwater angler nationally (FEUS 2015)



# Comments and Questions

NOAA Fisheries  
Atlantic HMS Management Division

Clifford Hutt  
[cliff.hutt@noaa.gov](mailto:cliff.hutt@noaa.gov)