Recreational Anglers Attitudes and Preferences: Regional Results

Presented at the
Recreational Fisheries Constituents Economic Workshop
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Survey Overview: Design and Implementation

* May 2012: Survey development
  * Input from regional recreational economists and recreational coordinators, constituent groups

* June - Aug. 2012:
  * Instrument feedback from constituent groups, MAFAC, four focus groups in Orlando, Fl. and San Diego, CA.

* Aug. - Sept. 2012: Survey finalized

* Sept. 2012 - Jan. 2013: PRA Review and approval

* Feb. 2013 - May 2013: Implementation
  * Survey implemented 36,362 mailings, 9,226 completed surveys

* Six survey sections:
  * Fishing participation
  * Preferences for management strategies
  * Preferences for management objectives
  * Satisfaction with management
  * Managing the marine environment
  * Socio-demographics
Survey Overview: Sampling Design

* Stratified design within national framework
* Contractor implemented telephone screeners before Segment 2 mailing
* Response rates ranged from 21% (Gulf) - 38% (North Atlantic)

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of Participants (using 2010 estimates)</th>
<th>Proportion of Anglers in Region</th>
<th>Target Number of Completed Observations (Total N = 8,000)</th>
<th>Sample Frame required to meet Target (assuming response rate in next cell)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>281,000.00</td>
<td>3%</td>
<td>202</td>
<td>673</td>
</tr>
<tr>
<td>West Coast</td>
<td>1,400,000.00</td>
<td>13%</td>
<td>1,007</td>
<td>3,355</td>
</tr>
<tr>
<td>North Atlantic</td>
<td>1,486,015.00</td>
<td>13%</td>
<td>1,068</td>
<td>3,561</td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>2,775,926.00</td>
<td>25%</td>
<td>1,996</td>
<td>6,652</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>2,469,609.00</td>
<td>22%</td>
<td>1,776</td>
<td>5,918</td>
</tr>
<tr>
<td>Gulf of Mexico</td>
<td>2,714,931.00</td>
<td>24%</td>
<td>1,952</td>
<td>6,506</td>
</tr>
<tr>
<td>Florida</td>
<td>2,084</td>
<td></td>
<td>991</td>
<td>1,093</td>
</tr>
<tr>
<td>North Atlantic</td>
<td>1,299</td>
<td></td>
<td>852</td>
<td>447</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,127,481.00</strong></td>
<td><strong>100%</strong></td>
<td><strong>8,000</strong></td>
<td><strong>26,667</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Needed</th>
<th>Completed Surveys Segment 1</th>
<th>Completed Surveys Segment 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaska</td>
<td>212</td>
<td>75</td>
<td>137</td>
</tr>
<tr>
<td>West Coast</td>
<td>1,417</td>
<td>494</td>
<td>923</td>
</tr>
<tr>
<td>Gulf of Mexico</td>
<td>2,096</td>
<td>724</td>
<td>1,372</td>
</tr>
<tr>
<td>South Atlantic</td>
<td>2,084</td>
<td>991</td>
<td>1,093</td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>2,118</td>
<td>1,287</td>
<td>831</td>
</tr>
<tr>
<td>North Atlantic</td>
<td>1,299</td>
<td>852</td>
<td>447</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,226</strong></td>
<td><strong>4,423</strong></td>
<td><strong>4,803</strong></td>
</tr>
</tbody>
</table>
Survey overview: Differences in Regional Instruments

Fishing Location and Target Species

4. During the past 12 months, which area did you most frequently fish from? (Check one.)
   - Washington
   - Oregon
   - Northern California
   - Southern California
   - Other ________________________________

5. What species do you frequently target when you fish off the coasts of California, Oregon or Washington? (Check all that apply.)
   - Rockfish, greenling, sculpin, other bottomfish
   - Bonito, barracuda, seabass
   - Surperches
   - Crabs, clams, lobster, other shellfish
   - Herring, smelt, grunion, sardine, mackerel, anchovy, baitfishes
   - Halibut, other flatfish
   - Sturgeon, striped bass
   - Salmon
   - Tuna, yellowtail
   - Other ________________________________
   - None, I don’t typically target any particular species

4. During the past 12 months, which area did you most frequently fish from? (Check one.)
   - Texas
   - Louisiana
   - Alabama
   - Mississippi
   - West Coast of Florida

5. What species do you frequently target when you fish off the coasts of Texas, Louisiana, Alabama, Mississippi, or the West Coast of Florida? (Check all that apply.)
   - Drums/grunts (red/black drum/Atlantic croaker)
   - Red snapper
   - Black seabass
   - Gulf and southern kingfish
   - Sand, silver or spotted seatrout
   - Spanish mackerel
   - Dolphinfish/Cobia/Wahoo
   - Sharks
   - Jacks (Amberjack, Crevalle jack, pompano, permit, blue runner)
   - Other ________________________________
   - None, I don’t typically target any particular species
## Results: Angler Avidity

<table>
<thead>
<tr>
<th></th>
<th>Alaska</th>
<th>West Coast</th>
<th>Gulf Coast</th>
<th>South Atlantic</th>
<th>Mid-Atlantic</th>
<th>North Atlantic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years fishing</td>
<td>19.4</td>
<td>29.7</td>
<td>25.1</td>
<td>25.0</td>
<td>32.2</td>
<td>30.0</td>
</tr>
<tr>
<td>Days fished last year</td>
<td>10.9</td>
<td>18.3</td>
<td>28.6</td>
<td>24.3</td>
<td>29.5</td>
<td>24.4</td>
</tr>
<tr>
<td>Fishing trips will decrease next year*</td>
<td>32.1</td>
<td>21.5</td>
<td>20.3</td>
<td>17.1</td>
<td>20.5</td>
<td>16.0</td>
</tr>
<tr>
<td>Decrease due to*...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...fisheries regulations</td>
<td>20.0</td>
<td>46.8</td>
<td>50.3</td>
<td>42.0</td>
<td>44.7</td>
<td>42.9</td>
</tr>
<tr>
<td>...fishery conditions</td>
<td>33.3</td>
<td>51.9</td>
<td>25.5</td>
<td>33.1</td>
<td>47.3</td>
<td>46.9</td>
</tr>
<tr>
<td>...fishing trip costs</td>
<td>70.3</td>
<td>60.0</td>
<td>59.6</td>
<td>64.3</td>
<td>68.3</td>
<td>63.0</td>
</tr>
<tr>
<td>...personal finances</td>
<td>61.5</td>
<td>50.0</td>
<td>51.4</td>
<td>53.3</td>
<td>59.0</td>
<td>55.0</td>
</tr>
<tr>
<td>...change of residence</td>
<td>15.2</td>
<td>15.9</td>
<td>12.9</td>
<td>15.2</td>
<td>11.2</td>
<td>10.8</td>
</tr>
<tr>
<td>...available leisure time</td>
<td>51.6</td>
<td>50.6</td>
<td>52.0</td>
<td>55.3</td>
<td>55.0</td>
<td>59.0</td>
</tr>
</tbody>
</table>

*Respondents stating “Very likely” or “Somewhat likely”
## Results: Fishing location and mode

<table>
<thead>
<tr>
<th></th>
<th>Alaska</th>
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<th>Gulf Coast</th>
<th>South Atlantic</th>
<th>Mid-Atlantic</th>
<th>North Atlantic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>During the last year, most fishing trips taken...</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Within 3 miles from shore</td>
<td>72</td>
<td>75</td>
<td>78</td>
<td>86</td>
<td>86</td>
<td>85</td>
</tr>
<tr>
<td>...More than 3 miles from shore</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td><strong>During the last year, most fishing trips taken from...</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>...Private boat</td>
<td>43</td>
<td>54</td>
<td>56</td>
<td>46</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>...Shore (beach, bridge, pier, jetty)</td>
<td>20</td>
<td>27</td>
<td>31</td>
<td>50</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>...For-hire vessel</td>
<td>37</td>
<td>19</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>
Preferences for Management Strategies

A. Establish minimum size limits of the fish you can keep
B. Establish maximum size limits of the fish you can keep
C. Limit the total number of fish you can keep
D. Manage some species as catch-and-release only
E. Establish longer seasons with more restrictive bag limits
F. Establish shorter seasons with less restrictive bag limits
G. Establish shorter seasons with a larger variety of species you can legally catch
H. Increase the recreational harvest limit by decreasing the commercial harvest limit
I. Divide the recreational harvest limit among different modes (e.g., private anglers and for-hire/charter boat anglers)
J. Restrict certain types of fishing gear
K. Require the use of release techniques that reduce fish mortality
L. Provide artificial fish habitat (e.g., artificial reef) in some areas of the ocean
M. Protect and restore fish habitat that has been degraded
N. Designate some areas of the ocean as marine reserves with catch-and-release only fishing
O. Close some areas of the ocean for certain seasons
Most Preferred Management Strategies

- Limit total keep
- Provide artificial habitat
- Increase rec harvest/decrease comm. harvest
- Require release techniques to reduce mortality
- Establish minimum size limits
- Protect/restore degraded fish habitat
Least Preferred Management Strategies

- Divide rec. harvest limit among fishing modes
- Close areas for certain seasons
- Longer seasons/more restric. bag limits
- Shorter seasons/larger variety species legal to catch
- Shorter seasons/less rest. bag limits

Alaska: 0%
Gulf Coast: 0%
North Atlantic: 0%
West Coast: 0%
South Atlantic: 0%
Mid-Atlantic: 0%
Preferences for Management Objectives

A. Ensure that large quantities of fish are available to catch
B. Ensure that many different fish species are available to catch
C. Ensure that adequate numbers of trophy-sized fish are available to catch
D. Reduce the mortality associated with releasing fish that are not legal to keep
E. Ensure that future generations will have high quality fishing opportunities
F. Allocate some quota from commercial fisheries to recreational fisheries
G. Recover fish stocks that have been depleted
H. Protect marine biodiversity
I. Protect threatened or endangered marine species
J. Achieve consistency between state and federal fishing regulations
K. Simplify recreational fishing regulations
L. Monitor and enforce recreational fishing regulations
M. Ensure that the opinions of all recreational fisheries stakeholders are considered in policy-making
N. Ensure opportunities to fish in high quality fishing areas
O. Ensure that fishing sites are not heavily congested
Most Important Management Objectives

- Protect T&E marine species
- Recover depleted fish stocks
- Ensure future generations high quality fishing

- Alaska
- Gulf Coast
- North Atlantic
- West Coast
- South Atlantic
- Mid-Atlantic
Least Important Management Objectives

- Protect T&E marine species
- Ensure large quantities of fish
- Ensure fishing sites not congested
- Allocate comm. quota to rec. fisheries
- Adequate number of trophy fish

Regions:
- Alaska
- Gulf Coast
- North Atlantic
- West Coast
- South Atlantic
- Mid-Atlantic
Satisfaction with Management

A. Managing fish stocks to provide high quality fishing opportunities
B. Restoring fish stocks that have been depleted
C. Adjust regulations in a timely manner to address changing conditions of the fishery
D. Using management strategies that minimize costs to anglers
E. Ensure that the annual harvest limit provides enough fish for recreational fisheries
F. Ensure that state and federal regulations are consistent
G. Monitoring and enforcing recreational fishing regulations
H. Using high quality data and assessments in policy-making
I. Incorporating stakeholder interests in policy-making
J. Protecting fish or shellfish species that are declining
K. Protecting marine habitats
L. Addressing conflicts between anglers and marine mammals
Most Satisfied with Management

- Manage stocks to provide high quality fishing opps
- Monitor/enforce recreational regs
- Protecting declining fish/shellfish species
- Ensure harvest limits provide sufficient fish for rec. fishing
- Protecting marine habitat

Regions:
- Alaska
- Gulf Coast
- North Atlantic
- West Coast
- South Atlantic
- Mid-Atlantic
Least Satisfied with Management

Ensure harvest limits provide sufficient fish for rec. fishing
Protect declining fish/shellfish species
Monitor/enforce recreational regs
Address angler/mammal conflicts
Use high quality data
Incorporate stakeholder interests
Ensure consistency btw state/federal regs
**Next steps**

* National report done


* Regional reports in development

* Need input from regional coordinators on recent policy actions

**Attitudes and Preferences of Saltwater Recreational Anglers: Report from the 2013 National Saltwater Angler Survey, Volume I**