



NOAA
FISHERIES

Data Needs for Stated Preference Models

Sonia Jarvis
Office of Science and Technology
Recreational Fisheries Data and Model Needs Workshop

7/26/2011

Existing SP Data

- AK: 2002
- AHMS: None
- NE: 2000, 2009, 2010
- NW: 2006
- PI (Hawaii): 2006
- PI (everywhere else): None
- SE (Caribbean): None
- SE (GOM): 2003
- SE (S. Atlantic): 2003, 2009, 2010 (partial)
- SW: 2009



Obstacles

- Infrastructure:
 - No existing survey panel
 - Mandatory participation not possible
 - Difficult to identify relevant audience
- Time:
 - PRA/OMB approval process takes a long time
 - Time-intensive process:
 - Development
 - Conducting /fielding survey
 - Analyzing data
- Manpower:
 - Not enough FTEs (funding)
 - Lack of specialization in this area



Obstacles (cont'd)

- Cost:
 - Lack of funding
 - Development and fielding can be costly
 - Surveys usually require complex administration plans
 - Difficult to implement as an “add-on” to existing surveys
 - Low response rates for voluntary surveys
- Coverage:
 - SP studies are typically species specific
 - Results not generalizable
 - Surveys difficult to implement in multiple regions
 - Lack of multi-year/repeat studies



Obstacles (cont'd)

- Other:
 - Limited Center/Region recognition of usefulness of these types of studies or studies not a priority
 - Cultural differences can cause problems in implementation
 - Surveys are difficult for some respondents to understand, resulting in low item and unit response rates
 - Contracting process is difficult
 - Cannot consistently obtain results relevant to management processes



Data Collection Priorities

- Data to support location choice models
- Data for fresh/saltwater mixed species (e.g., salmon)
- More data that can be used in conjunction with existing revealed preference data
- Social/cultural valuation data
- Social network data

Data Process Priorities

- Increase regularity/repeat collections
- Improve item and unit response rates
- Improve sampling frames
- Increase sample sizes
- Improve delivery method
 - Questionnaire design
 - Mode (Mail vs. Internet)
- Improve data collection timelines
 - Time between survey development and final data delivery very lengthy

Model Priorities Requiring Data Enhancements

- Valuation of keep vs. catch-and-release
- Impact/value of regulatory tools on anglers
- Impact of seasonality/weather on angler decisions
- Improvements in trip/participation estimates in response to changes in fishery
- Changes in preferences over time
- Changes in preferences after large-scale closures or catastrophic events

Other Needs/Improvements

- Standardization of survey instruments
 - Minimizes bias (or imposes same bias) across surveys, allowing for comparison of results between different survey instruments
 - Ensures standard product outcomes
 - Reduces survey development time
 - “Trains” anglers to take complex SP surveys
 - Repeated exposure to similar environment
 - Promotes a form of branding (like Census)
 - Allows for development of modeling “toolbox”
 - Enable semi-automation
 - Simplifies analysis (reduce time and skills required)

