

# Overview of the MRIP Volunteer Angler Data Workshop

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# MAFMC – Membership



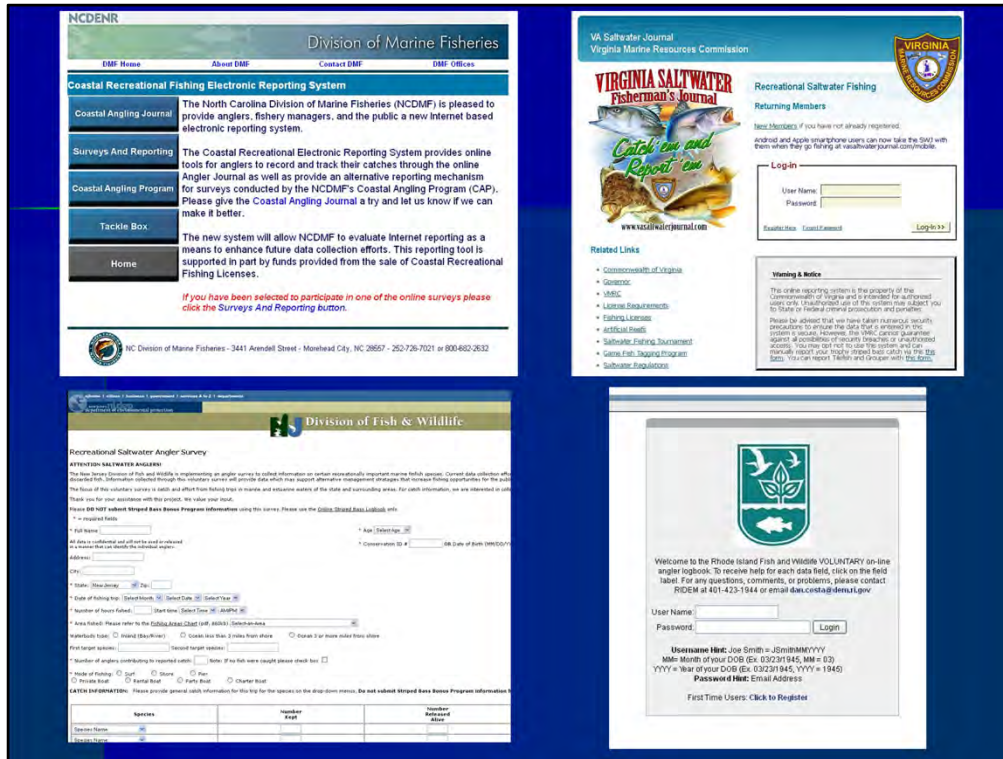
# MAFMC - 13 Species, 7 Plans



## What about Volunteer Data?

- All angler data is “Volunteer” – even surveys
- “Opt-In Angler Panels” more accurately describes the topic of the workshop.
  - Comprised of self-selected individuals who volunteer to participate
  - Should/how can these be used?

If people don't participate in surveys, data will just get more uncertain...



Most states have online logbooks that anglers can use to record catches. States have been collecting and using discard data for regulatory analysis.

## Why?

- State panel data collection is increasing
- Some anglers really like to participate
- If you collect data but don't (or can't) use it people will get mad...and rightfully so

## When/Where was the Workshop?

- Feb 2, Baltimore, MD
- [www.mafmc.org/events/volunteerdata.htm](http://www.mafmc.org/events/volunteerdata.htm)
- Mafmc....events...2/2 volunteer data

The whole thing was recorded and can be viewed at the workshop website...



## Can a Survey Predict Anything?

- Sometimes Yes!
- Consider 2004 and 2008 Presidential Election Surveys...
- From 1/50<sup>th</sup> of 1% of likely voters...120-130 million vs about 20,000 respondents

First step back. Looking at surveys versus opt-in angler logs for fishing catch and effort. There are at least some examples of where surveys can nail what the public is doing/thinking...

# 2004...Bush vs. Kerry

Poll	Date	Bush/ Cheney	Kerry/ Edwards	Nader/ Camejo	Spread
<b>RCP Average</b>	<b>10/27 - 11/1</b>	<b>48.9%</b>	<b>47.4%</b>	<b>0.9%</b>	<b>Bush +1.5</b>
Marist (1026 LV)	11/1	49%	50%	0%	Kerry +1
GW/Battleground (1000 LV)	10/31 - 11/1	50%	46%	0%	Bush +4
TIPP (1041 LV)	10/30 - 11/1	50.1%	48.0%	1.1%	Bush +2.1
CBS News (939 LV)	10/29 - 11/1	49%	47%	1%	Bush +2
Harris (1509 LV)	10/29 - 11/1	49%	48%	2%	Bush +1
FOX News (1200 LV)	10/30 - 10/31	46%	48%	1%	Kerry +2
Reuters/Zogby (1208 LV)	10/29 - 10/31	48%	47%	1%	Bush +1
CNN/USA/Gallup(1573 LV)*	10/29 - 10/31	49%	49%	1%	TIE
NBC/WSJ (1014 LV)	10/29 - 10/31	48%	47%	1%	Bush +1
ABC/Wash Post (2904 LV)**	10/28 - 10/31	49%	48%	0%	Bush +1
ARG (1258 LV)	10/28 - 10/30	48%	48%	1%	TIE
CBS/NY Times (643 LV)	10/28 - 10/30	49%	46%	1%	Bush +3
Pew Research (1925 LV)	10/27 - 10/30	51%	48%	1%	Bush +3
Newsweek (882 LV)	10/27 - 10/29	50%	44%	1%	Bush +6



Bush won  
by ~2.4%

All of the polls were close...

# 2008...Obama vs McCain

Polling Data						
Poll	Date	Sample	MoE	Obama (D)	McCain (R)	Spread
<b>Final Results</b>	--	--	--	<b>52.9</b>	<b>45.6</b>	<b>Obama +7.3</b>
<b>RCP Average</b>	10/29 - 11/3	--	--	<b>52.1</b>	<b>44.5</b>	<b>Obama +7.6</b>
Marist	11/3 - 11/3	804 LV	4.0	52	43	Obama +9
Battleground (Lake)*	11/2 - 11/3	800 LV	3.5	52	47	Obama +5
Battleground (Tarrance)*	11/2 - 11/3	800 LV	3.5	50	48	Obama +2
Rasmussen Reports	11/1 - 11/3	3000 LV	2.0	52	46	Obama +6
Reuters C-SPAN Zogby	11/1 - 11/3	1201 LV	2.9	54	43	Obama +11
IBD TIPP	11/1 - 11/3	981 LV	3.2	52	44	Obama +8
FOX News	11/1 - 11/2	971 LV	3.0	50	43	Obama +7
NBC News Wall St. Jnl.	11/1 - 11/2	1011 LV	3.1	51	43	Obama +8
Gallup	10/31 - 11/2	2472 LV	2.0	55	44	Obama +11
Diageo Hotline	10/31 - 11/2	887 LV	3.3	50	45	Obama +5
CBS News	10/31 - 11/2	714 LV	--	51	42	Obama +9
Ipsos/McClatchy	10/30 - 11/2	760 LV	3.6	53	46	Obama +7
ABC News/Wash Post	10/30 - 11/2	2470 LV	2.5	53	44	Obama +9
CNN Opinion Research	10/30 - 11/1	714 LV	3.5	53	46	Obama +7
Pew Research	10/29 - 11/1	2587 LV	2.0	52	46	Obama +6



Obama won  
by ~7.3%

[http://realclearpolitics.com/epolls/latest\\_polls/](http://realclearpolitics.com/epolls/latest_polls/)

All of the polls were close...

## What If...

- Don't talk randomly to likely voters
- Let folks sign up to be part of a group that votes.
- How well will that group predict all of voting America?

You'll get great input but probably from folks who really care about politics and this "opt-in panel" probably won't perform as well as a random sample. The randomness is a strength, not a weakness.

With fishing, if avid anglers who catch more participate (this happens), then estimates will be biased on the high side (overestimates).

## What about fishing?

- Trying to estimate many "things"...
- Those "things" are more complicated...
  - Easier to make mistakes in sampling
- Fewer responses on each "thing"
  
- Results are less precise
- May be unbiased but so imprecise as to be un-useful...

The "things" are catch rates for dozens of species in different states across different modes (for hire, shore, private boat, etc) or participation (numbers of trips taken). While a lot of anglers are intercepted, the numbers who had a particular species are usually pretty low.

# What is Truth?

**Your Query Parameters:**

<b>Query:</b>	MRIP CATCH TIME SERIES
<b>Year:</b>	2011 - 2011
<b>Wave:</b>	ANNUAL
<b>Species:</b>	BLACK SEA BASS
<b>Geographic Area:</b>	NORTH CAROLINA
<b>Fishing Mode:</b>	ALL MODES COMBINED
<b>Fishing Area:</b>	ALL AREAS COMBINED
<b>Type of Catch:</b>	HARVEST (TYPE A + B1)
<b>Information:</b>	NUMBERS OF FISH

[Return to Query Page](#)

Estimate Status	Year	Common Name	Total Harvest (A+B1)	PSE
FINAL	2011	BLACK SEA BASS	95,004	24.7

Is MRIP even trying to say that 95,004 black sea bass were caught?

## What is Truth?

- 95,004 with a PSE of 24.7
- ~95% chance that real answer is between 48,000 and 142,000 with a 5% chance that it is outside that range.
- PSE of 25 means  $95\% \pm 50\%$

PSE is critical. It tells you the uncertainty of the estimate. If you double the PSE, that is just about the range of the 95% confidence interval (stats stuff). In other words, a CV of 25 means that there's a 95% probability that the real answer is plus or minus 50% of the estimate. PSEs go down for larger areas/times.

## How to Fix?

- Just don't survey, talk to anglers that want to talk to you? Maybe not...
- Increase Sampling (\$\$)
- Manage differently (not state by state, average years)

If avid anglers want to participate, and they catch more fish, estimates from their data will be biased high and create overestimates. If the 10% catching 90% of the fish participate, then in real trouble using that data for the typical trip that doesn't catch that much...



## What can we do with panels?

- Variables that are closely correlated with the decision to participate in an opt-in panel have a high likelihood for bias.
- Like catch rates...avid anglers are more likely to participate.

## What can we do with panels?

- Variables that are less closely correlated with the decision to participate in an opt-in panel have a lower likelihood for bias.
- Like size-age studies, maybe sizes of released fish, site register updating

## What can we do with panels?

- Use them carefully – what is risk relative to potential for bias?
- Inform decision makers of risk and potential for bias.
- Inform participants of limitations on using opt-in data

## What can we do with panels?

- If a panel is selected randomly and you can get most of those selected to participate, then you can use such panels for in-depth exploration of particular issues with less bias concerns.