Science, Service, Stewardship

Making Anglers' Catch Count

Preston Pate
NC Fisheries Forum
April 21, 2012

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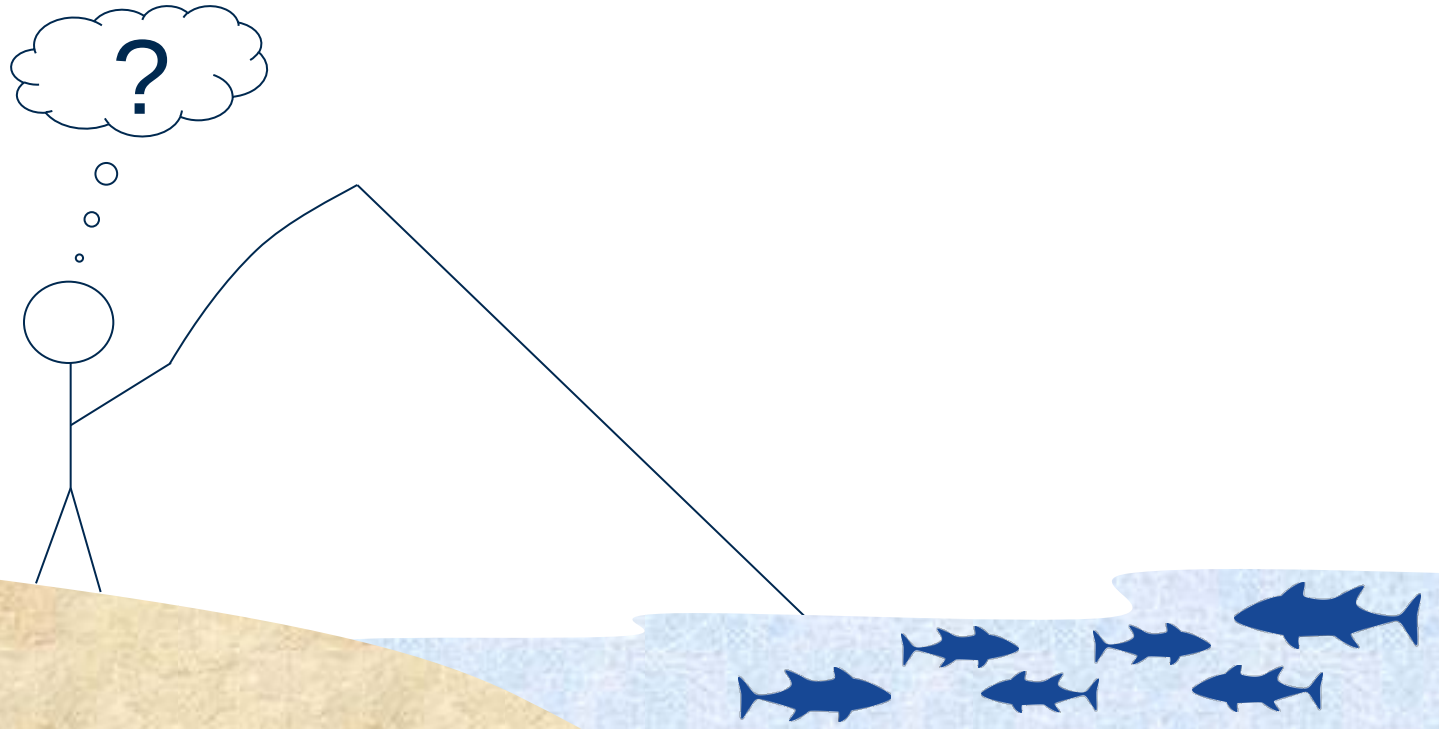
Why do you count fish?



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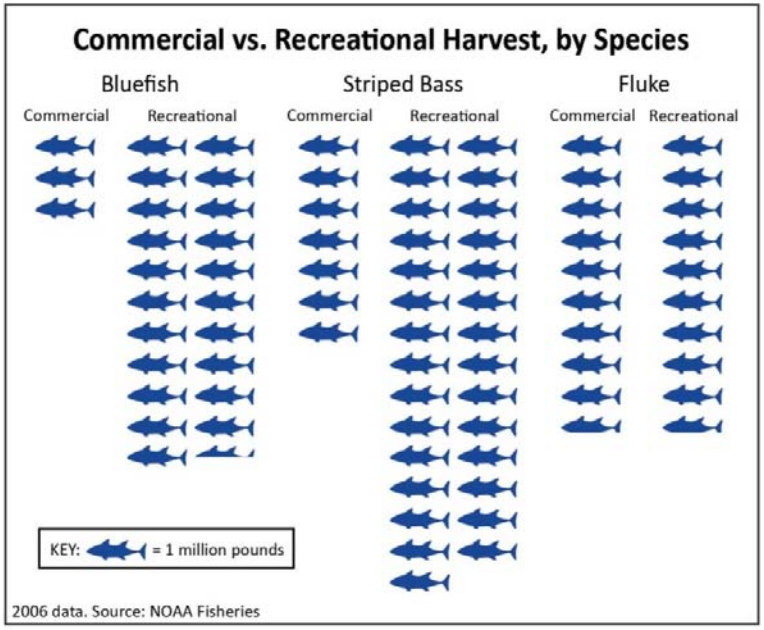
First Things First

Why do we put so much effort into gathering this information in the first place?

- Impacts of recreational fishing
  - On the resource
  - On coastal communities
  - On American heritage

Our oceans are a shared resource that must be managed in ways that are transparent, fair and sustainable



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First Things First

How is this information used?

- What we do **NOT** do is base fisheries management decisions on any one source of information.
- Other factors that weigh into decision-making include:
  - Commercial catch and effort
  - International fisheries information
  - “Fisheries-independent” data; e.g. information collected research vessels.
- At each step in the management process, fishermen, scientists, managers, state and local officials and others weigh in.
- At the heart of this process is accurate, trusted data.

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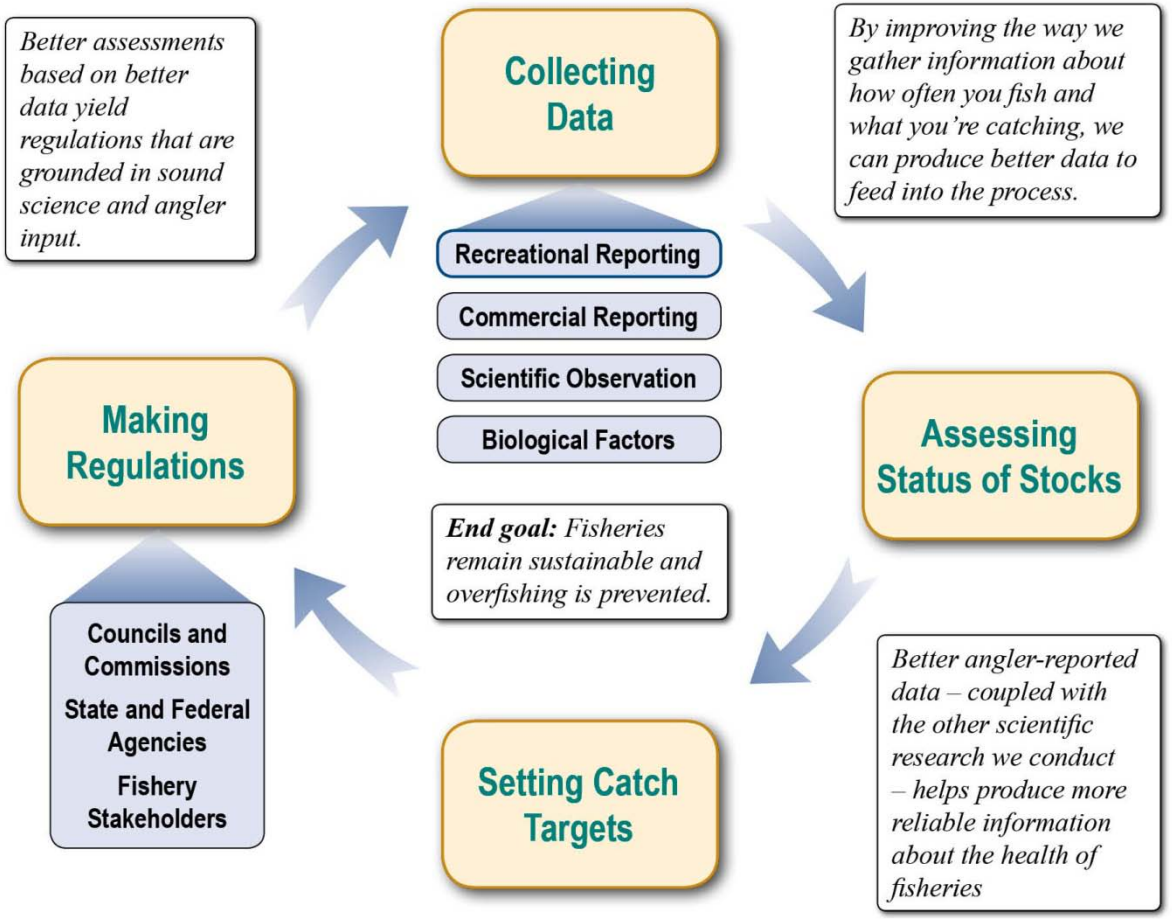
Better Data Means Better Management
In Each Phase of the Process

As a fisherman, what we learn from your activities is one important piece of a dynamic cycle of management aimed at preserving our ocean resources



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So How Do We Get There?

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To Sample or Census?

Large numbers of anglers spread out over a vast area.

Impossible to count all fish landed.

Sampling anglers gives us a good estimate.

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Estimating Recreational Fishing Catch and Effort

NOAA Fisheries provides two measures of recreational fishing activity:

- **Catch**, or the number, species and size of fish caught.
  - Generally determined through shore-side intercepts.
- **Effort**, or the number of fishing trips taken during a particular reporting period.
  - Generally determined through telephone surveys.

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Trips x Catch/Trip = Total Catch

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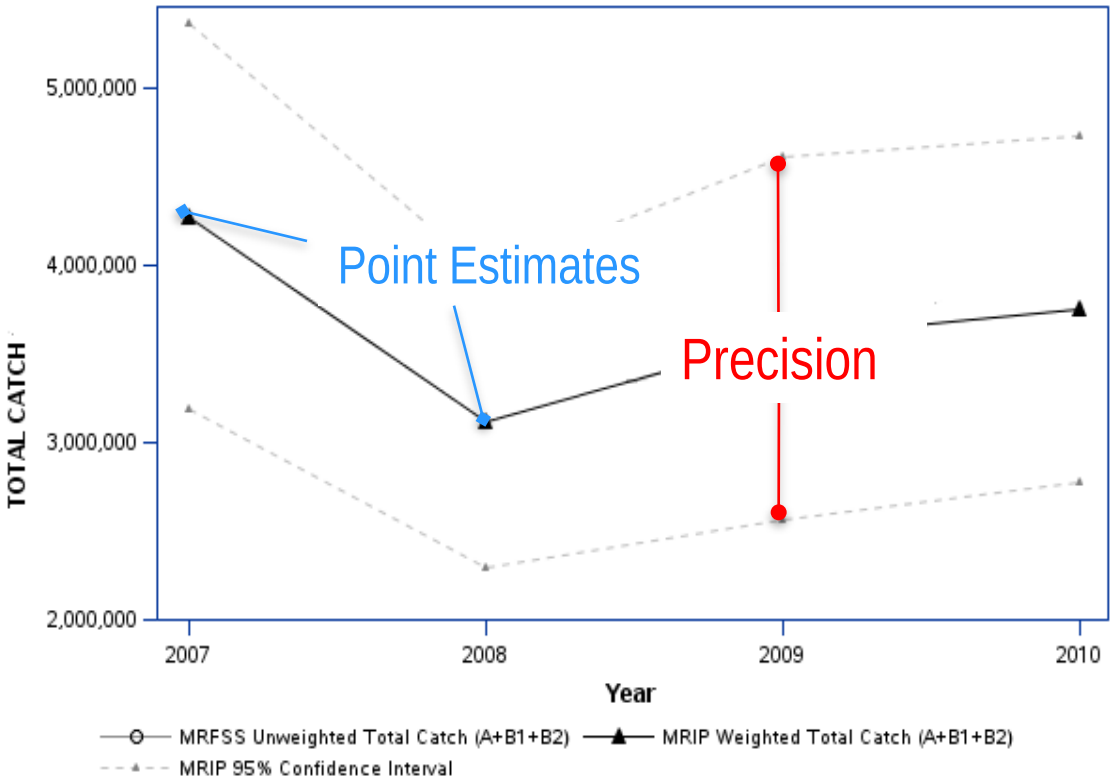
Anatomy of an Estimate



Each estimate is made up of 2 parts: the **point estimate** and its associated measure of **precision**, expressed either as the Percent Standard Error (PSE) or graphically as the Confidence Interval.

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The current system works well, but we can improve it.

Issues related to:

1. How we construct and carry out our surveys.
2. How we select anglers and fishing access sites to sample.
3. Math we use to generate catch and trip estimates.
4. How to estimate catch from anglers using private access sites

Our blueprint is the 2006 National Research Council review and 2007 Magunson-Stevens Act.

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Marine Recreational Information Program

Helping NOAA do a better job of counting your catch and providing new ways to ensure your catch counts.

To provide quality information that decision-makers need and build the public's trust in the science used in conservation.

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Governance Structure of MRIP

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How we're doing this

1. Evaluating our existing methods
2. Researching new procedures to improve surveys and improve data quality.
3. Implementing those procedures to deliver data that's more timely, precise, and fine scale.

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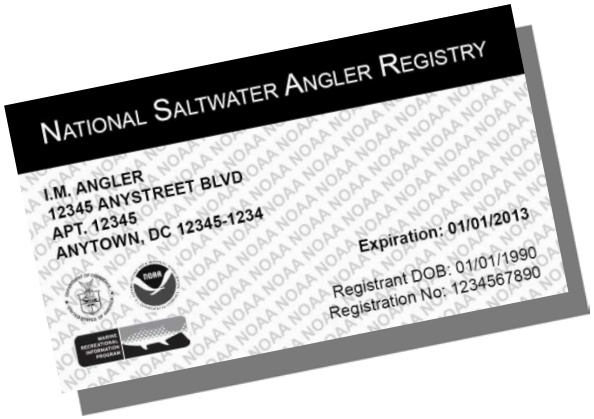
What we've done

State and National Licensing and Registration

- Allows us to get better contact information for anglers
- Accuracy, completeness and survey response remain evolving issues



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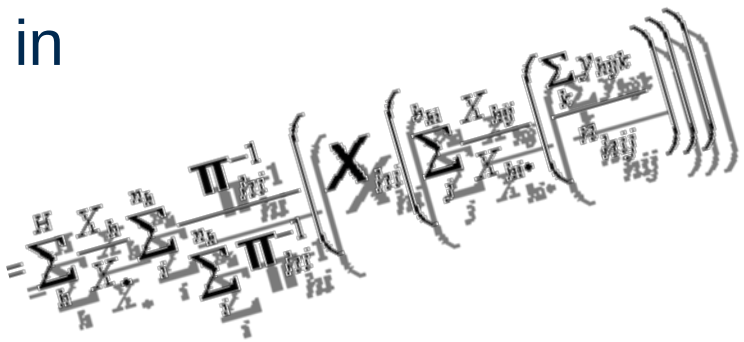
What we've done

New method for generating catch estimates

- Results in more accurate estimates
- Compliment pending changes in data collection



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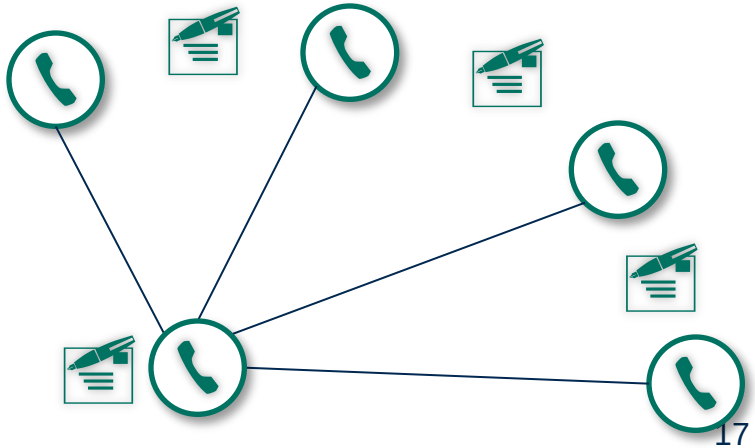
What's coming next

New Trip Survey

Angler Registry provides an important frame for sampling anglers.

Studies are underway to evaluate best survey methods.

Timeline: 2014



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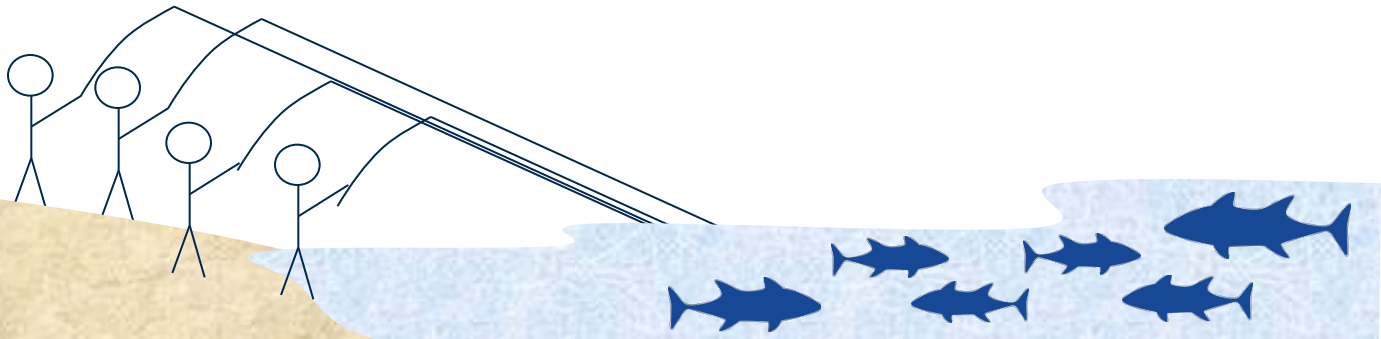
What's coming next

New Catch Survey

Pilot tested in North Carolina last year. Implementing coast-wide in 2013.

New intercept methods will eliminate potential for bias in sampling.

Anglers using private access



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Some other questions we're addressing

- Will logbooks deliver better data for charter and headboat trips?
- Can we report estimates more frequently and with higher levels of precision?
- Can we get a better handle on the number of released fish and their condition?
- Are there alternative ways for anglers to report data that are scientifically sound?

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Why this is important

Many people have a hand in making fishing regulations, but ultimately the process revolves around you.

- As an angler, you're on the front line of conservation.
- You are our eyes and ears on the water. The information you share with us ensures your catch counts.
- Your participation and input at meetings ensures anglers have a voice in the management process.

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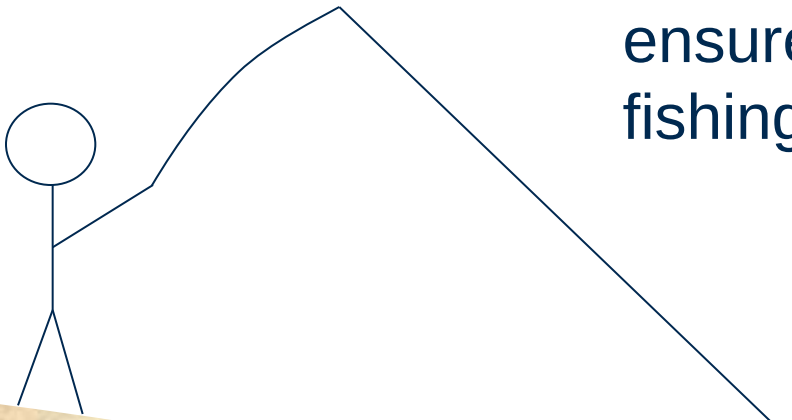
Why this all matters

Solid science improves decision-making and helps ensure a quality fishing experience.



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For more information, visit us online at

www.CountMyFish.noaa.gov