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FISHERIES

Northeast
Fisheries
Science Center

Integration Summary

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A lot of information this week



TOR 1&4

- To what extent do fishery independent and dependent data quality, statistical precision, and timeliness issues impact overall assessment accuracy, precision and timeliness?



Fine print: lots of details!

How does an assessment integrate data?

- Depends who you ask



Putting the pieces together

- Population trends (surveys)
 - What is regional plan for surveys
 - Can there be too many surveys
 - Industry confidence in surveys
- Fishery removals (fishermen, dealers, port samplers, and observers)
 - When and where did a fishing event occur
 - How much did they catch
 - How old were the fish that died
- Biology (surveys and cooperative research)
 - M, maturity, growth



Data
Assessment
Management
In Sync

Some other issues to consider

- Thousands of vessels, hundreds of dealers
 - How best to collect necessary information from them – and what is necessary?
- Weighting components in assessment
 - Both art and science
 - Model should reflect uncertainty in data
 - Cannot always be measured
 - Conditioned on model formulation

Philosophical debates of all vs “good” data and simple vs complex models coming next year

What is point of diminishing returns?

- e.g. Space
 - Data resolution over time
 - Heroic efforts may be needed
 - Assessment vs management
- Matching expenditures (surveys, data collection systems, assessment) to value of resource/fishery
 - There is more to NEFSC than groundfish

Integrating data

- Strengths
 - Necessary basis for modeling and management
 - Continual improvement
 - Data used for many things in addition to assessments
- Challenges
 - Pieces don't always fit together
 - Demonstrates how little we really know
 - More data does not necessarily mean better assessments or increased quota



TOR 7

- What recommendations do you have for prioritizing fishery-independent and fishery-dependent data collection improvements?

Unique link “one trip, one ID”



Wrap up

- Lots of dedicated people working hard to continually improve data collection
- Mnemonic for fishery independent and dependent data

Functional

Leverage

Abundant

Revealing

Extrapolation

