

# Groundfish Operational Assessments 2017



Northeast Fisheries Science Center

New England Fishery Management Council Gloucester, MA September 27, 2017

### **Presentation Overview**

# Describe the Operational Assessment Process

Summarize Key Findings of the 2017 Groundfish Operational Assessments

Next steps



#### **Operational Assessment Timeline**

You are here

Northeast Regional Coordinating Council meeting Assessment Oversight Panel meeting July 24

Industry
Outreach
meetings
Aug-Sep

Conduct Assessments Aug-Sep Peer Review Meeting Sep 11-15 Final report to the NEFMC:
PDT
SSC
October



## Outreach

- Discuss assessment process, cooperative research opportunities, and efforts to engage industry in the assessment process moving forward
- Diverse participants Stakeholders, Assessment scientists,
   Cooperative research program, Port agents, Regional office staff, and
   New England Fishery Management Council staff
  - 8/15 Chatham, MA: Cape Cod Commercial Fisheries Alliance
  - 8/16 New Bedford, MA: New Bedford Fishing Heritage Center
  - 8/17 Portland, ME: Portland Fish Exchange
  - 8/18 Gloucester, MA: Sawyer Free Library
  - 8/28 Point Judith, RI: Superior Trawl/NESTCO Conference Room
  - 8/30 Montauk, NY: Montauk Public Library
  - 9/6 Portsmouth, NH: Portsmouth Public Library
  - 9/7 Plymouth, MA: John Carver Inn Conference Room
- Primarily identified questions, research needs, and improvements
- Some relevant feedback mentioned during peer review



# Generic TORs - few changes allowed

- Update the data
- Run the models to estimate stock size and fishing mortality
- Update the values of Biological Reference Points
- Evaluate Stock Status
- Estimate Overfishing Limit or other Catch Advice
- Sources of Uncertainty and Research Needs
- Plan B if model fails
- Consider catchability estimates, incorporate directly into relevant empirical assessments



# Peer Review - the Players

### <u>Assessment Peer Review Panel</u>

- Patrick Sullivan (Co-Chair) Cornell University
- Patrick Lynch (Co-Chair) NOAA Science & Techology
- Gary Nelson MADMF
- Jim Berkson NOAA-Sea Grant

## Other Key Participants

- Assessment Oversight Panel: J McNamee, J Boreman, R Brown
- Catchability Peer Review Panel: S Cadrin, M Dean, G DeCelles, J Gartland
- SAW/SARC Chair James Weinberg (NEFSC)
- Stock Assessment Leads (NEFSC)
- Jamie Cournane—NEFMC (at review table)
- Large audience in Woods Hole and on Webinar



## Review of Each Stock

- Acceptability (or not) of assessment as scientific basis for management advice
- Recommendation of alternative basis for catch if assessment is not accepted
- Key sources of uncertainty
- Research needs
- Note: Peer review reports are still being finalized.



## Data Portal



http://www.nefsc.noaa.gov/groundfish/operational-assessments-2017/



# **Data Portal Output**

Search Criteria
Assessment Year
Species
Stock
Information Type

**OUTPUTS** 

Zip File=Everything Assessment Report Figures Tables Model info: inputs,

outputs, diagnostics
Maps—Survey
Maps –Commercial
Background Reports

## **Stock Assessment Models**

### <u>VPA</u>

- Georges Bank haddock
- Plaice
- Georges Bank winter flounder
- Cape Cod-Gulf of Maine yellowtail flounder

#### **OTHER**

- GB cod
- Ocean Pout
- Witch flounder
- N Windowpane
- S Windowpane
- GOM winter flounder
- Wolffish
- GB yellowtail flounder

#### <u>ASAP</u>

- Gulf of Maine cod
- Gulf of Maine haddock
- Pollock
- Redfish
- White hake
- Southern New England-Mid Atlantic winter flounder
- Southern New England-Mid Atlantic yellowtail flounder

# Enhancements to Process – Plan Bs, Catchability, and Ecosystem Context

- Alternative basis for catch advice developed in advance for all analytical assessments – reviewed and approved by AOP
- Meeting started with presentation on ecosystem indices and trends applicable to the suite of stocks
  - Panel considered this context and commented extensively on ecosystem-related research needs
- "Flatfish day" started with presentation on cooperative research on survey catchability
  - Catchability estimates directly used in three empirical assessments (GOM winter, witch, GB yellowtail flounders)
  - Catchability info provided for context/comparison/diagnostics for analytical assessments



# Reviewers Findings (finalizing drafts)

- All 19 stock assessments were judged as an acceptable scientific basis for management advice
- Recommended stock status improved for one stock and did not change for the rest
- Catch advice recommended for each stock
- Catchability information was valuable in evaluating analytical assessments and was directly used in several empirical assessments
- Ecosystem information was helpful and panel provided several related research recommendations



# Recommended Status Score Card

#### Overfished and Overfishing (4)

**GOM Cod** 

Cape Cod/GOM Yellowtail Flounder

GB Yellowtail Flounder\*

SNE Yellowtail Flounder

#### Not Overfished and Overfishing (0)

#### Overfished but No Overfishing (4)

SNE Winter Flounder

Wolffish

Northern Windowpane

Ocean Pout

#### Not Overfished and No Overfishing (8)

**GB** Haddock

**GOM Haddock** 

**GB Winter Flounder (improved)** 

Plaice

Redfish

White Hake

Pollock

Southern Windowpane Flounder

#### Overfished and Overfishing Unknown (2)

GB Cod

Witch Flounder

#### **Unknown and No Overfishing (1)**

**GM Winter Flounder** 

\*GB Yellowtail Flounder was reviewed by the Transboundary Resources Assessment Committee, so the Operational Assessment Peer Review Panel did not comment on status. The indication here is based on prior status determination.

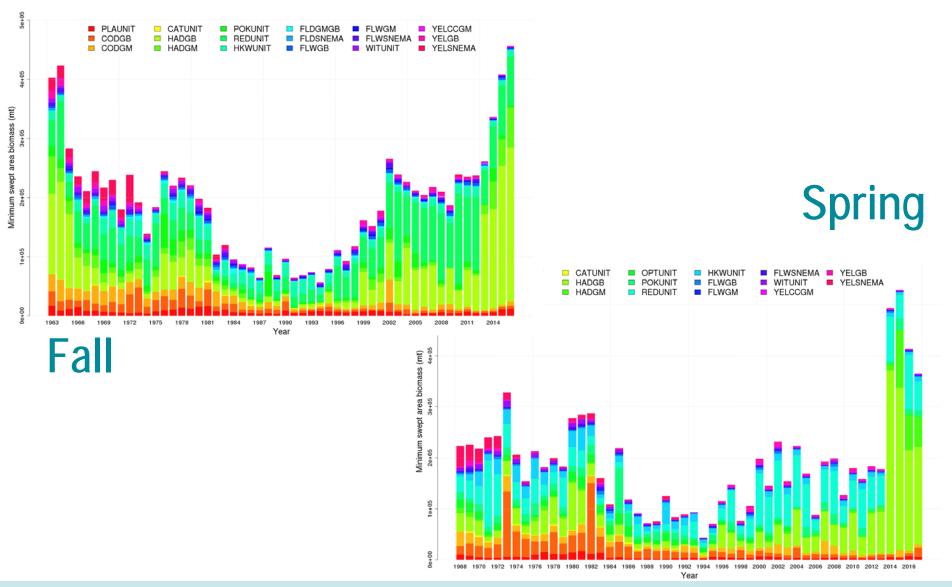


# Retrospective Adjustments

- Retrospective Pattern—a consistent pattern (bias) of over or under estimating terminal year biomass and fishing mortality
- Retrospective adjustment applied when the retrospective pattern/bias is major (outside the uncertainty of the original estimate)
- Stocks with retro adjustments increased from 7 to 8
  - Five of those retros are "improving" (less bias)



# Minimum swept area biomass





# Next Steps

- PDT analyses underway
- SSC to determine OFLs and set ABCs
- Consideration by Council committees
- Review at December 5-7 Meeting of Council

 NMFS to review status recommendations and make final status determinations (for unknowns)



## **Questions?**

