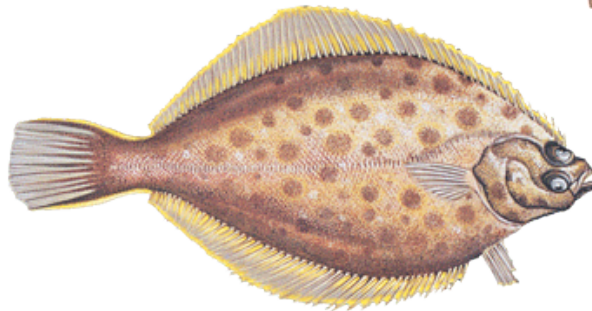
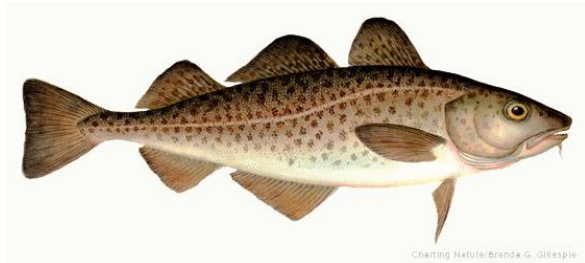
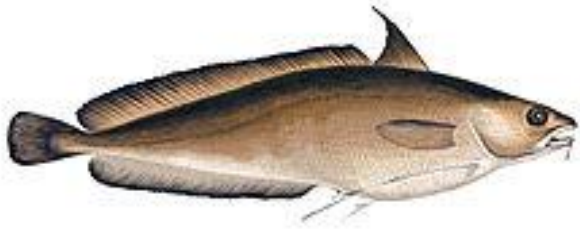


SSC Report to NEFMC



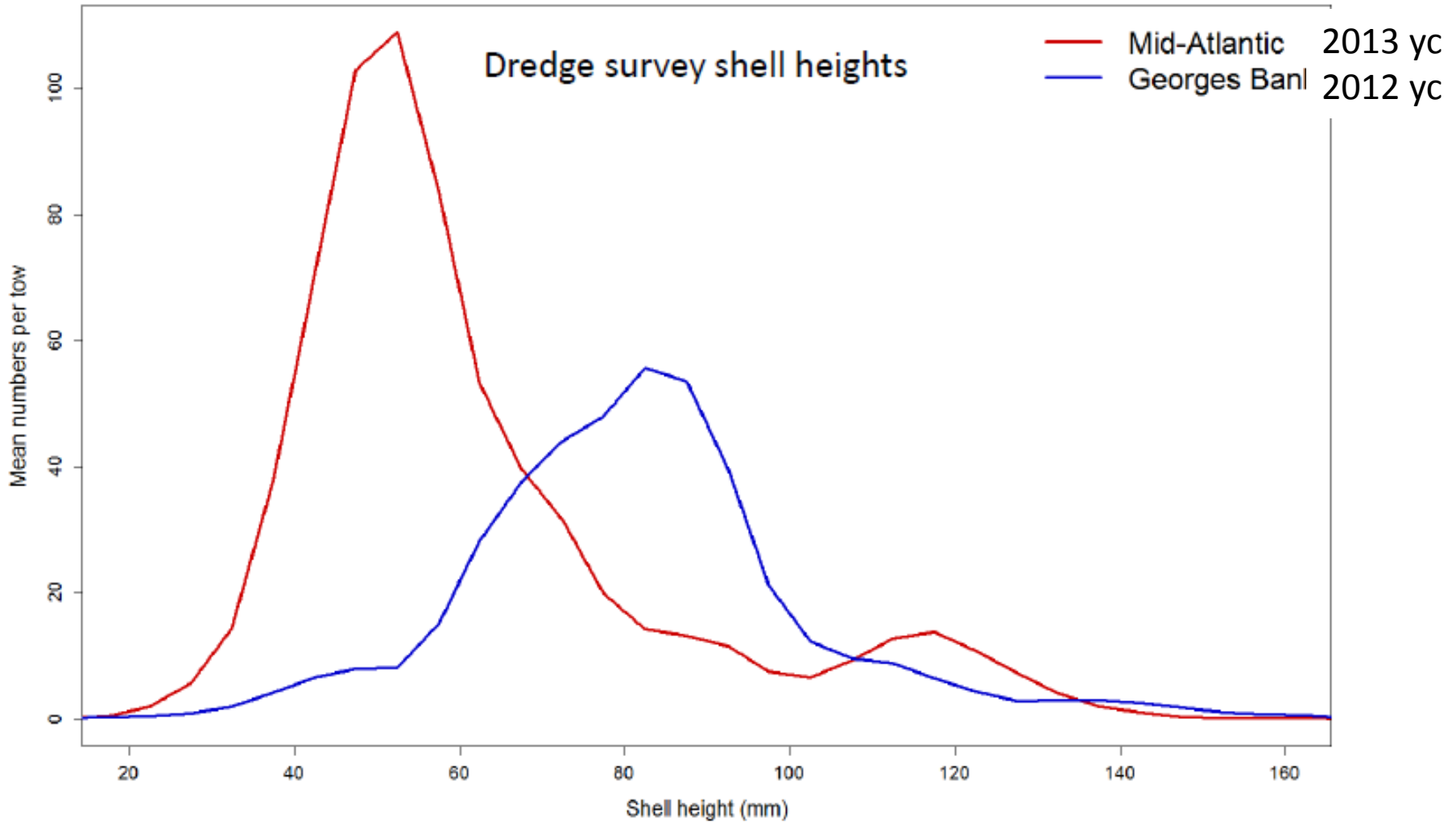
Portland, ME
December 1, 2015

Jake Kritzer, SSC Chair

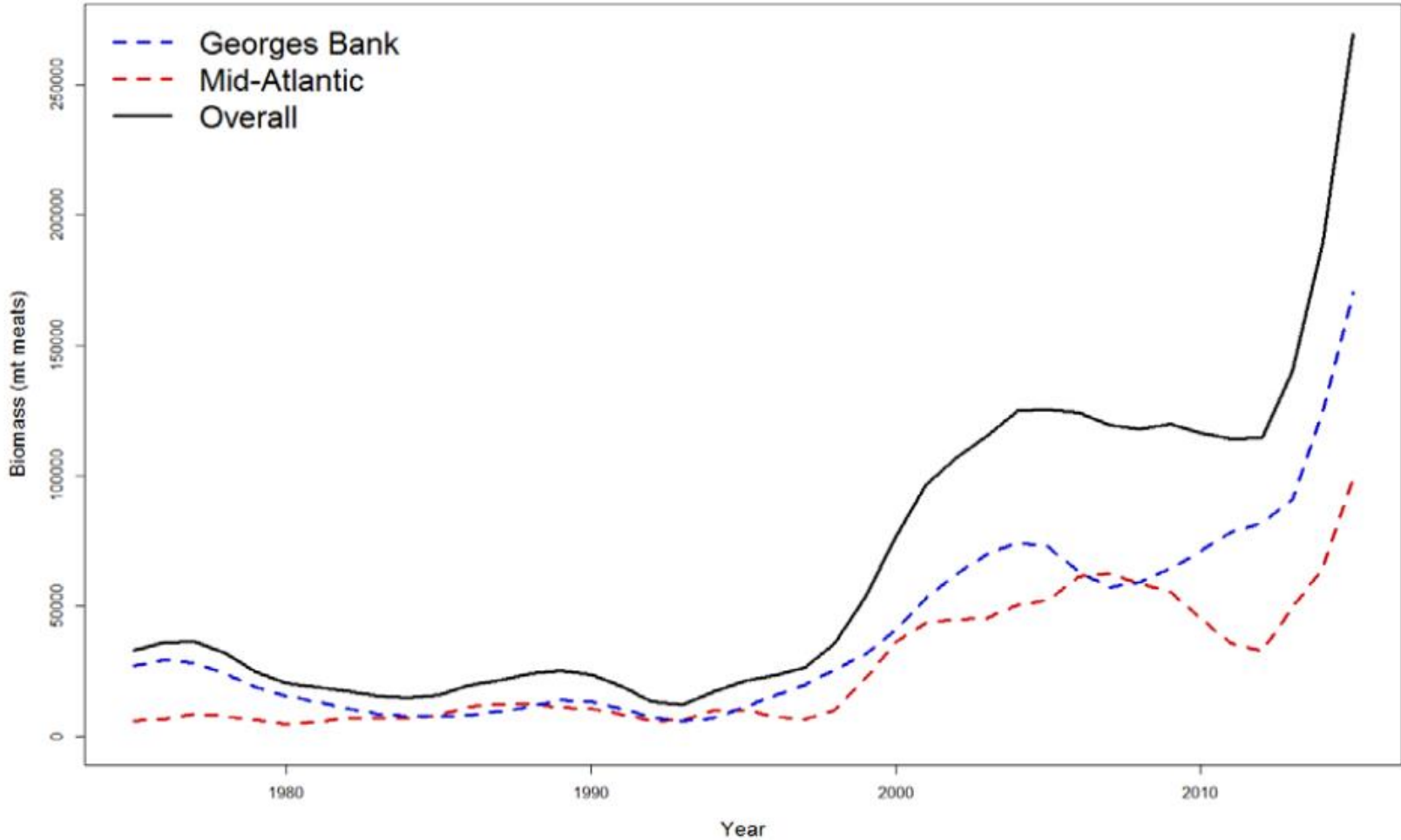
Topics

- Scallop OFLs & ABCs 2016-2017.
- Red hake OFLs & ABCs 2016-2017.
- Groundfish OFLs & ABCs 2016-2018.
- Comments on NOAA's draft EBFM policy.

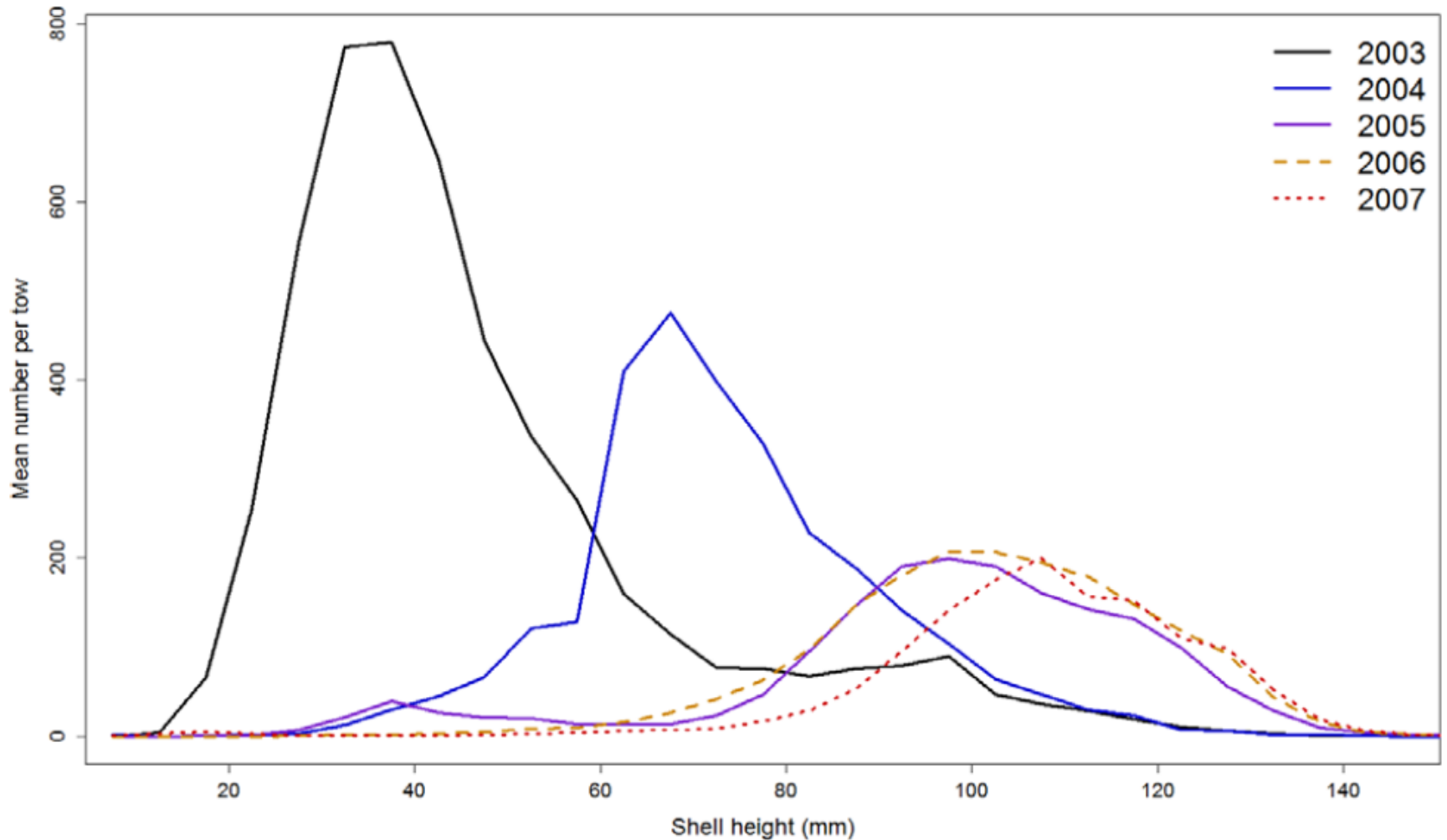
Scallops: Recent strong cohorts



Scallops: Biomass estimates



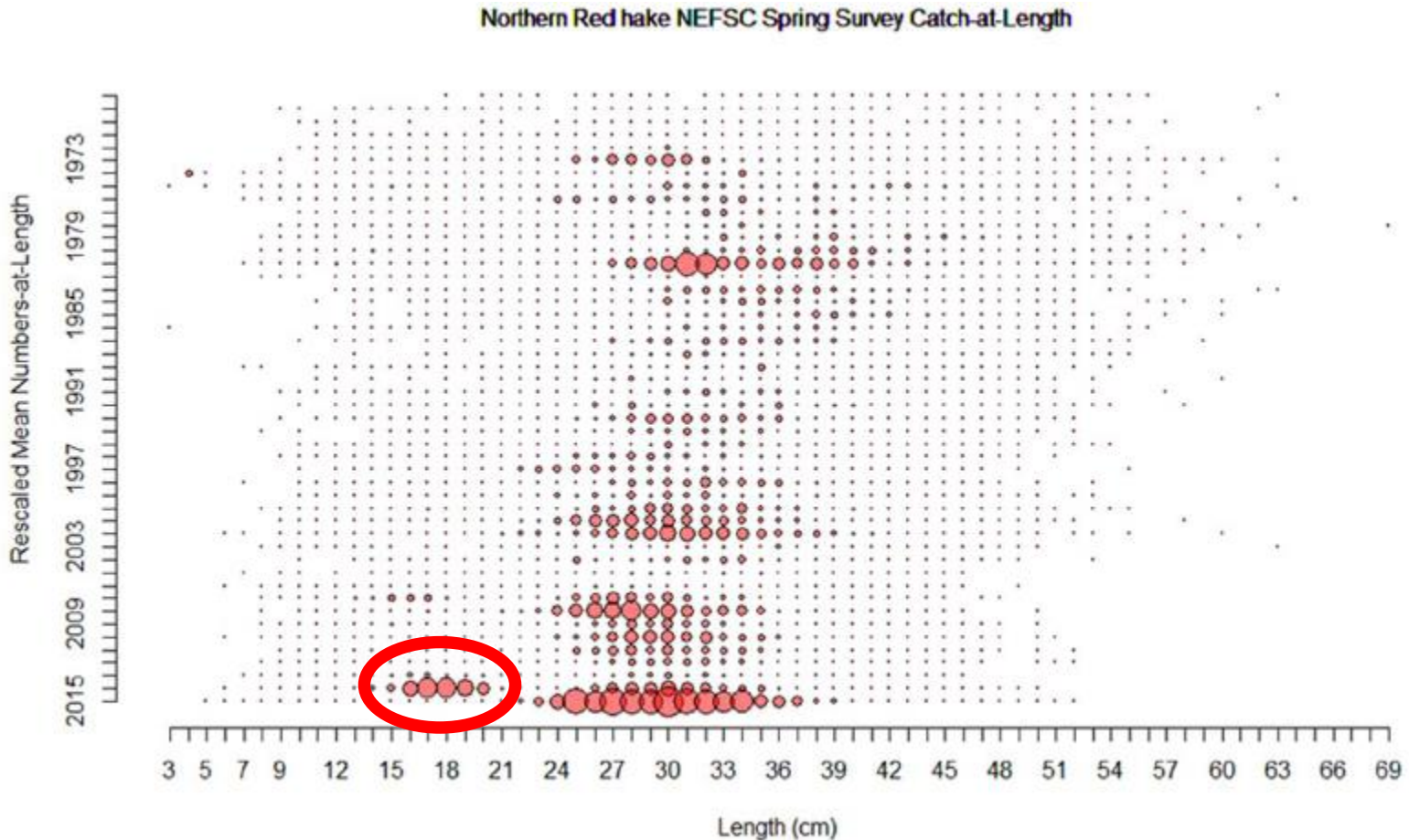
Scallops: Past experience



Scallops: Summary

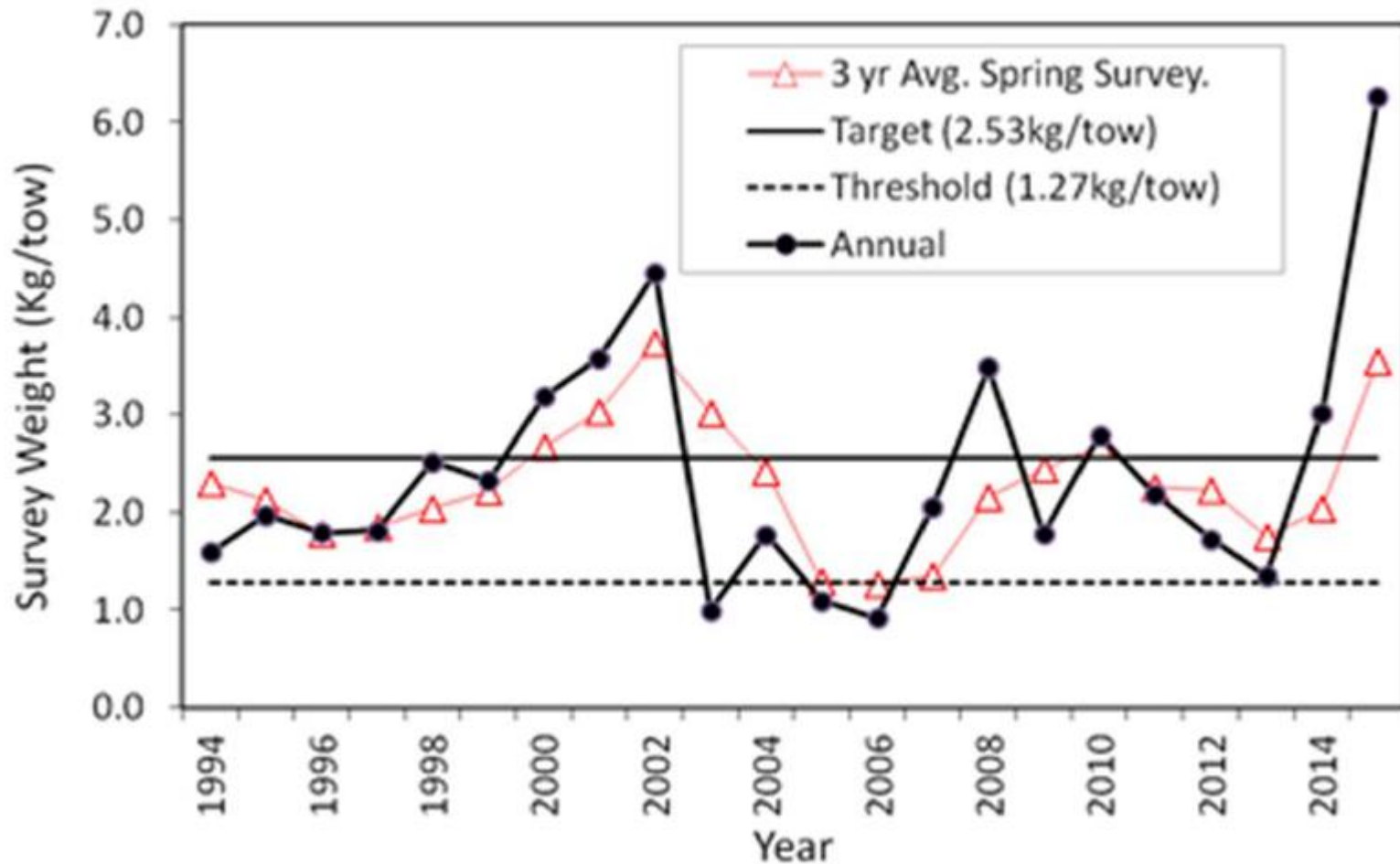
- Strong recent year classes evident in both Mid-Atlantic & Georges Bank.
- Past experience suggests higher mortality of young scallops at high densities.
- Model is likely overestimating biomass.
- Survey-based estimates show greater variation, and therefore uncertainty.
- OFL: Recommend applying F target to 2016 projected biomass and holding constant for 2017 (default) → 68,418mt.
- ABC: Recommend applying F that results in 25% probability of overfishing to 2016 projected biomass and holding constant for 2017 (default) → 55,737mt.

Red Hake: Strong cohort in north



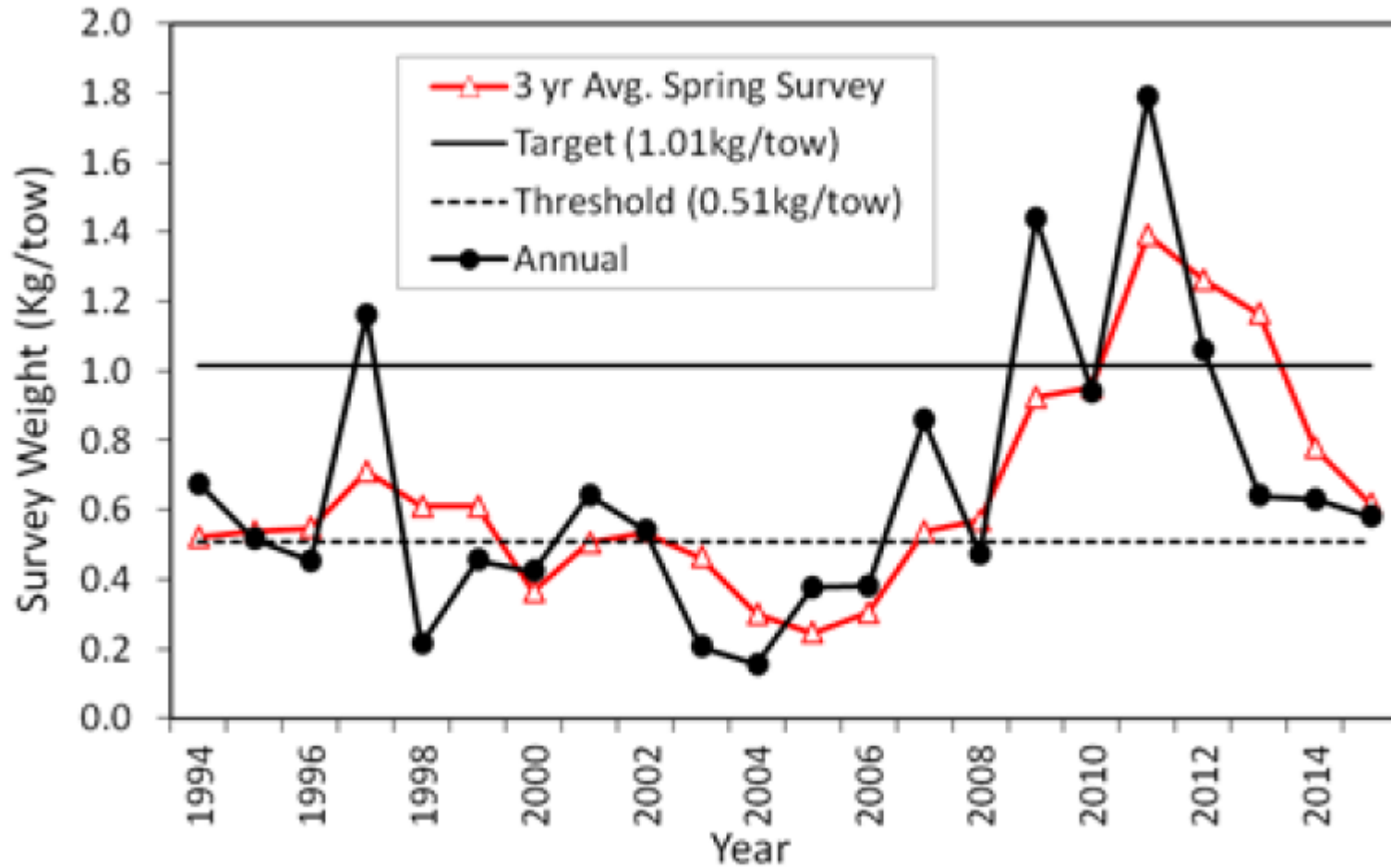
Red Hake: Survey trends

Northern



Red Hake: Survey trends

Southern



Red Hake: Summary

- 2014 detected large incoming cohort of young hake in northern stock that would affect fishery 2015-2017 specifications.
- 2015 survey confirmed presence of this cohort.
- 2015 survey also detected continued decline in southern stock.
- Northern:
 - OFL: 556mt for 2016 and 2017.
 - ABC: 496mt for 2016 and 2017.
- Southern:
 - OFL: 1,816mt for 2016 and 2017.
 - ABC: 1,717mt for 2016 and 2017.
- Spatial dynamics and environmental drivers should be further explored as data allow.

Groundfish: General issues

- Operational assessment process: Commend all participants for efforts to complete tasks in a focused and efficient manner.
- Retrospective patterns: Revisit appropriate scientific and management responses.
- Projections: Generally used full projection if above B threshold, but only 1 year if overfished.
- Strong cohorts: No adjustment if estimated to be on par with previous cohorts.
- Directional change in productivity: Scientific consensus need on definition and response.

Groundfish: GB cod

- Model not accepted due to major diagnostic issues, esp. drastic increase in retrospective.
- Peer review panel recommended decreasing ABC proportional to recent three-year survey trend.
- Magnitude of survey trend varies with timeframe.
- Expected to keep F close to recent levels?

Groundfish: GOM cod

- Steep decline in recent years has been arrested?
- Stock remains far below target biomass, and sustained rebuilding efforts needed.
- Recommend ABC is 30% greater than status quo:
 - Warranted until more substantial increases observed?
 - Update only accounts for ABCs through 2014; if positive effects truly detected, those should continue under ABCs of 386mt or 500mt.

Groundfish: GB haddock

- Stock status remains strong.
- 2013 cohort is estimated to be an order of magnitude larger than any observed.
- Implications for stock dynamics and catch advice are uncertain, but potentially profound.
- Appropriate to increase ABC, but down-weight this cohort.
- Constant ABC for 2016-2018 set using project biomass in 2017 incorporating reduction in cohort strength + density-dependent growth.

Groundfish: SNE/MA YTF

- Substantial increase in retrospective, which warranted adjustment per AOP “rules of engagement”.
- Adjustment would result in biomass estimate unable to support estimated catch; AOP rules silent on this contingency.
- Other model diagnostics were better (e.g., fit to survey data).
- Peer review approved model; SSC divided on whether that was appropriate and how to respond?
- Compromise approach is to set ABC midway between estimated 2015 catch and ABC that would result from 2016 biomass projection.

Groundfish: Winter flounder

- GB & SNE/MA stocks exhibited large decreases in biomass reference points and ongoing decreases in recruitment.
- No analytical assessment for GOM stock, but little apparent response to catch \ll ABCs.
- Suggest directional change in productivity, with implications for rebuilding expectations and management strategies.
- Resume previous efforts to identify environmental drivers for all three stocks jointly.

Groundfish: Atlantic halibut

- Peer review panel rejected assessment due to diagnostic concerns.
- Important consideration is whether assumed stock boundary adequately mirrors reality?
- E.g., 45% of State of Maine halibut tagging returns from 2001-2012 were from Canadian waters.
- Benchmark assessment is warranted, but thorough re-evaluation of stock boundary should take place first.

Groundfish: ABCs and OFLs

Stock	2016		2017		2018	
	OFL	ABC	OFL	ABC	OFL	ABC
GB cod	1,665	1,249	1,665	1,249	1,665	1,249
GOM cod	667	500	667	500	667	500
GB Haddock	160,385	77,898	258,691	77,898	358,077	77,898
GOM Haddock	4,717	3,630	5,873	4,534	6,218	4,815
GB Yellowtail Flounder	unknown	354	unknown	354	-	-
SNE Yellowtail Flounder	unknown	267	unknown	267	unknown	267
CC/GOM Yellowtail Flounder	555	427	707	427	900	427
Plaice	1,695	1,297	1,748	1,336	1,840	1,404
Witch Flounder	513	394	925	394	974	394
GB Winter Flounder	957	755	1,056	755	1,459	755
GOM Winter Flounder	1,080	810	1,080	810	1,080	810
SNE/MA Winter Flounder	1,041	780	1,021	780	1,587	780
Redfish	13,723	10,338	14,665	11,050	15,260	11,501
White Hake	4,985	3,816	4,816	3,686	4,733	3,622
Pollock	27,668	21,312	32,004	21,312	34,745	21,312
Northern Windowpane Flounder	243	182	243	182	243	182
Southern Windowpane Flounder	833	623	833	623	833	623
Ocean Pout	220	165	220	165	220	165
Halibut	210	158	210	158	210	158
Wolffish	110	82	110	82	110	82

NOAA EBFM Policy

- Discussion strayed from policy to broader issues: National Standards, risk policy, assessment process, etc.
- Policy would have been a useful context for preceding regional (SSC's EBFM white paper) and national (climate science strategy) efforts.
- Implications for Magnuson re-authorization?
- Where do new directions enter the process? Council? SSC? Elsewhere?
- Guidance needed on evaluating trade-offs among species revealed by attention to trophic interactions.
- Concept of “stability” needs more attention:
 - Ecological versus socio-economic.
 - High exploitation versus light exploitation.
 - Implications of species depletion and loss.
- Alignment with Lenfest Work Group recommendations?

THANKS!
QUESTIONS?