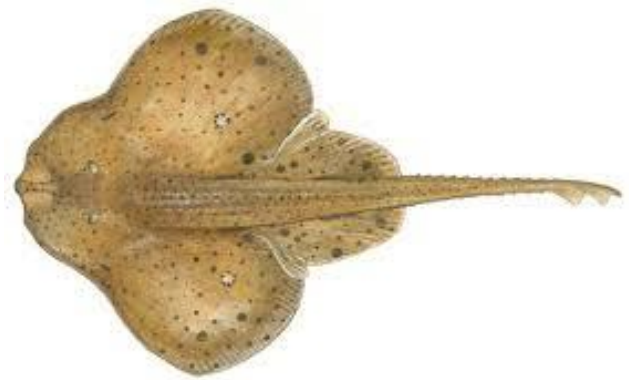
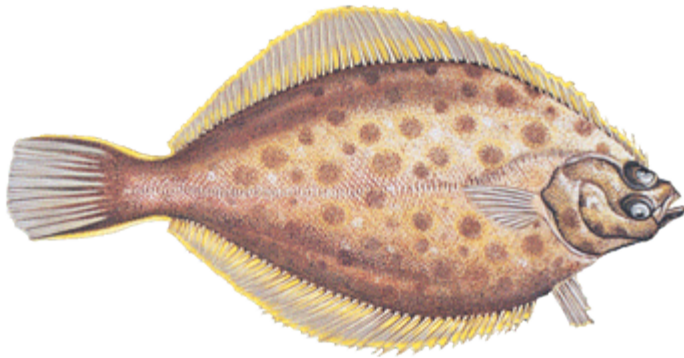


SSC Report to NEFMC



Plymouth, MA

September 30, 2015

Jake Kritzer, SSC Chair

Georges Bank Yellowtail Flounder

- TOR: Provide the OFL and an ABC for each year for fishing years 2016 and 2017 that will meet management objectives and prevent overfishing.
- Pre-2014: TRAC conducted VPA, but retrospective bias was troubling.
- 2014:
 - NEFSC hosts Diagnostic Benchmark to consider wider range of empirical data and approaches than typical assessment.
 - TRAC adopts empirical approach using average swept-area biomass from DFO, NEFSC Spring and NEFSC Fall surveys.
 - SSC sets ABC applying exploitation rate of 16% to average biomass estimate.

Georges Bank Yellowtail Flounder

Year	DFO	NMFS Spring	NMFS Fall (year-1)	Avg. (mt)	mu =	2%	16%
						Catch Advice (mt)	Catch Advice (mt)
2010	8,233	22,181	26,936	19,117		382	3,059
2011	3,450	9,557	8,976	7,328		147	1,172
2012	5,063	14,908	9,793	9,921		198	1,587
2013	629	4,119	10,065	4,938		99	790
2014	462	2,684	3,493	2,213		44	354
2014 revised	462	2,763	3,493	2,240		45	358
2015	741	1,891	4,092	2,241		45	359

Georges Bank Yellowtail Flounder

SSC advice:

- Retain empirical approach, although some members see value in considering VPA as well.
- Concern about uncertainties and potential for large swings in survey-based estimates.
- Changes to ABC only warranted when substantial changes in estimates observed (consider, e.g., 3-year moving average?).
- **Retain status quo ABC = 354mt.**

Georges Bank Yellowtail Flounder

SSC observations:

- Realized catch << ABC (159mt vs 400mt in 2014)
→ Positive outcome given previous SSC advice to reduce catch as much as possible.
- Catch is poor indicator of status → assessment and catch advice NOT based on catch data.
- Worthwhile to better understand the relative importance and interactions among factors that determine realized catch (management, markets, ecology, etc.).
- Revisit outcomes of 2014 Diagnostic Benchmark, which considered a wealth of information.

Northeast Skate Complex

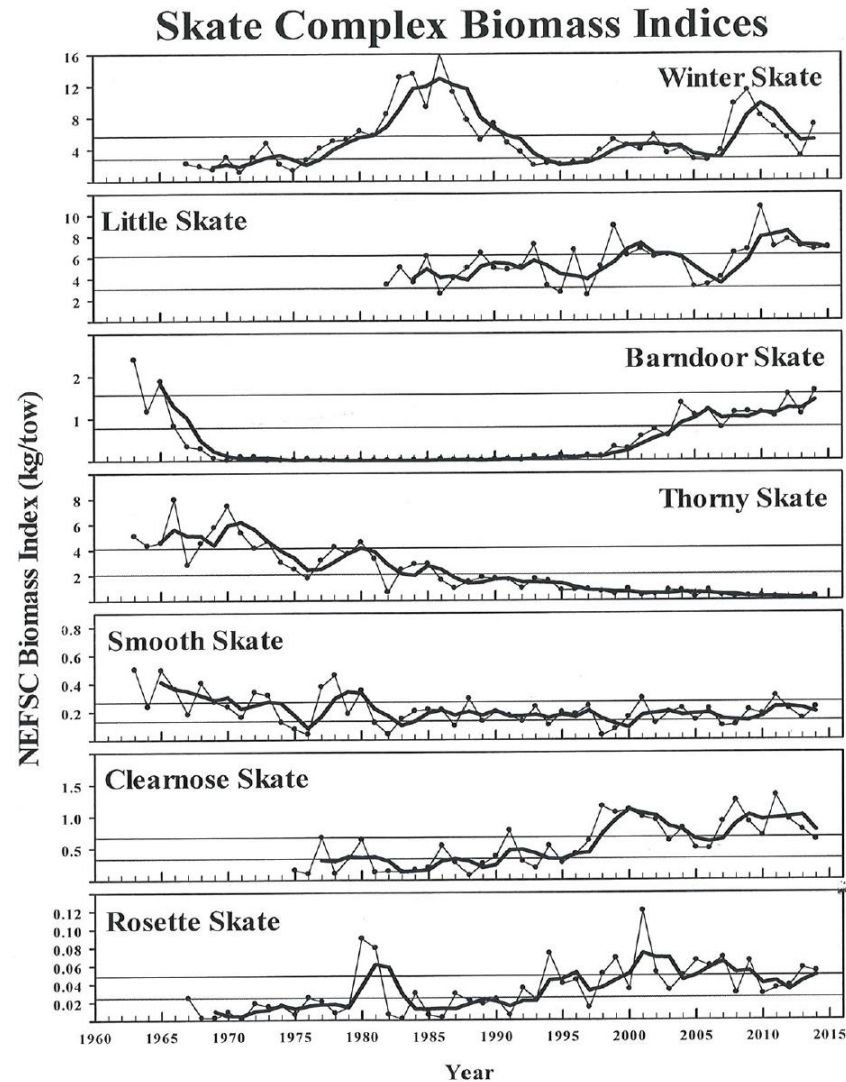
TORs:

1. Approve method for estimating scallop dredge discard mortality to be used in ABC specifications for fishing years 2016-2017.
2. Review and approve revised estimate of MSY resulting from preliminary discard mortality updates.
3. Recommend an ABC for the Northeast Skate Complex consistent with the fishing mortality limit (FMSY or its proxy) and the ABC control rule or rebuilding program for fishing years 2016-2017 contingent on the use of the approved method for finalizing discard mortality estimates.

Northeast Skate Complex

- New VIMS report to NMFS on condition and mortality post-capture in scallop dredges (Rudders et al. 2015).
- Not yet published, but similar methodology and several authors in common with research on trawl mortality previously considered and adopted (Mandelman et al. 2013).
- New estimates for little skates (48%) and winter skates (34%) are suitable for development of reference points and catch advice.
- Updated values:
 - $MSY = 36,860\text{mt}$
 - $ABC = 31,081\text{mt}$

Northeast Skate Complex



Northeast Skate Complex

- Most species at or near biomass target.
- Thorny skate biomass and trend are troubling.
- Only management measure in place for thorny skates is prohibition on landings → inadequate?
- Environmental stressor other than fishing driving population dynamics?
- Recommend more thorough discussion with PDT of scientific and management issues related to thorny skates.

THANKS!
QUESTIONS?