

Flatfish AM Development

July 17, 2017



Goal/Objective of this effort:

- “AMs are management controls to prevent ACLs, including sector-ACLs, from being exceeded, and to correct or mitigate overages of the ACL if they occur. AMs should address and minimize both the frequency and magnitude of overages and correct the problems that caused the overage in as short a time as possible. NMFS identifies two categories of AMs, inseason AMs and AMs for when the ACL is exceeded.” (From NSI Guidance)
- NSI guidance, Council have not prescribed a target bycatch savings for AMs.
- **FOR FW29: Develop a response in the event that an AM is triggered.**
 - Reactive – Mandatory for NWP, consider changing for GB and SNEYT stocks
 - Proactive – Optional, may help to prevent exceeding sub-ACL

Focus, current AMs

- Committee/Council: **Focus on GRAs**, can consider time area/closures
- Generally, size/duration of current AMs depends on sub-ACL overage
- Through SNE/MA Windowpane AM (FW25), GRA “savings” calculated for each month 5 row apron with 1.5:1 hanging ratio required. 20% threshold considered for small/large AM
- GB YT and SNE/MA YT: Time/area closures where size and duration are linked to incremental overages/savings

What we (think) we know:

- Status of YT and windowpane, and how regulations have changed over time
- How we generate in-season bycatch estimates (Ben G.)
- Spatial/temporal occurrence of windowpane/YT on Georges Bank, meat yields (CFF)
- Spawning information for GB YT and NWP (CFF)
- Landings information by fleet, gear, stat area, month. Seasonal importance of various areas. (Ben G.)
- Where the scallop fishery interacts with flatfish (10-minute square, SRA analysis of d:K ratios – Sam Asci with NEFOP)
- How apron length and hanging ratio impact bycatch (CFF, Dave Rudders)
- What gear configurations the industry fishes (ex: dredge design, hanging ratios) in the Mid-Atlantic and on Georges Bank (Sam)

Caveats when scaling up GRA data:

- Dredge frame configurations (TDD vs. NB)
 - Are there differences in scallop catch and bycatch savings between these two?
 - TDD is being used voluntarily on GB, not mandatory gear. How to use this data?
- Habitat/substrate of where gear is tested: MA vs. GSC vs. GB
- Trend lines are all moving in the same direction. Reductions across all flatfish species, and areas, with both dredge configurations.
- Several mandatory and voluntary measures to reduce flatfish bycatch that are already in place.

(Potential) Analyses:

- Bycatch “savings” of applying GRA or area closures (planned)
 - Consider how to stratify the data, mandatory and voluntary programs.

Table 17 - Estimate of WP reduction from Gear Modification AM by month for open areas west of 71 W (% reduction compared to projected WP catch with no AM and applying 45% reduction from the gear modification in the area west of TDD line (71 W))

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2007	1.62%	3.98%	4.40%	4.53%	1.03%	2.05%	2.87%	6.20%	8.19%	3.53%	1.19%	0.83%
2008												
2009	1.81%	6.04%	6.95%	4.91%	0.53%	3.01%	3.32%	2.28%	7.00%	1.17%	0.21%	0.68%
2010	1.93%	6.99%	4.40%	4.34%	0.93%	1.90%	1.40%	4.98%	7.67%	2.52%	0.73%	1.22%
2011	2.33%	6.66%	11.43%	10.61%	1.38%	0.98%	1.11%	1.47%	2.55%	2.02%	1.07%	1.05%
2012	2.07%	9.70%	10.93%	6.60%	1.46%	1.37%	1.34%	3.51%	3.58%	1.36%	0.48%	0.52%
mean	2.0%	6.7%	7.6%	6.2%	1.1%	1.9%	2.0%	3.7%	5.8%	2.1%	0.7%	0.9%

- TDD vs. NB: scallop catch and bycatch savings
- Weight based analysis of CFF work (in addition to size frequency)
- Thoughts on CAII Ext as part of the Access Area or open area
 - This is yellowtail country.

What we need to weigh in on today:

- **Define scope of AMs (size, duration) for each stock (3 total)**
 - EX: NWP and GB YT: All open areas on GB for some period of time.
 - EX: LA *and* LAGC IFQ AMs for GB YT and NWP
 - EX: Trawl closure with GRA for SNEYT?
- Develop AM trigger: small/large AMs with trigger threshold: 20%?
 - See what Cate put together (for last call).
- Say more about spatial management relative to access areas?
 - GB YT, NWP memo last year dealt with this topic
- Key factors Council should consider. Quantitative and qualitative.
- Are there additional analyses that we think we need to complete this work?
 - Or, do we have what we (think) need and can begin developing measures.

What are the key factors in AM design:

EX: Open areas on GB; Northern Windowpane

	Scallop Landings (rank by month)	Scallop Landings (2008 - 2016)	Scallop yield (estimate in grams)	Bycatch Savings – Gear Mod (%)	Average d:K	d:K quartile Rank	NWP Maturity status (From CFF bycatch survey)
January					0.233	1	
February					0.089	1	
March					0.114	1	
April					0.197	1	Ripe
May					0.028	2	Ripe, Ripe and running, spent
June					0.002	4	
July					0.005	3	
August					0.001	4	
September					0.000	4	
October					0.002	4	
November					0.015	2	
December					0.083	4	

Some Objectives for August PDT meeting:

- Complete analysis portion of work on flatfish AMs by this meeting.
- Discuss the parameters/impacts of potential AMs.
- Need to have options for Committee to consider in September.