



Tab B, No. 12(a)

Options:

Modifications to Gag and Black Grouper Recreational Retention Limits, Spatial Areas, and Commercial Management Measures



Regulatory Status

SEDAR 72 2022: gag is overfished and experiencing overfishing as of 2019

- Amendment 56 establishes a rebuilding plan for gag:
 - Sets F_{MSY} proxy at $F_{40\%SPR}$; sets OY at ACL when overfished, and at 90% of MSY when not overfished
 - Sets 18-year rebuilding plan, and revises sector allocation to 65% recreational and 35% commercial
 - Sets recreational ACT at 80% of recreational ACL
 - Sets commercial ACT at 95% of commercial ACL, and sets commercial quota equal to commercial ACT
 - Sets recreational fishing season to begin September 1 and close when the recreational ACT is projected to be met



Council Motion

RF56 was transmitted to NMFS on June 27, 2023; re-transmitted on September 11, 2023

- Rulemaking expected to take at least 6 months

Council interest in measures for gag and black grouper:

- *Motion: To direct staff to develop the following options for exploration in a framework action or amendment:*
 - *Lowering the gag and black grouper recreational bag limit*
 - *Establishing a gag and black grouper recreational vessel limit*
 - *Spatial areas to protect spawning gag (to be addressed in a separate document)*
- Black grouper included due to misidentification concerns with gag



Considerations...

- Black Grouper
 - Currently working on Amendment 58 to modify SWG complex ACLs
 - Black grouper is in the SWG complex
 - Black grouper stock assessment (or other analysis) to start fall 2025; management advice available fall 2026...?
- Gag
 - Gag OA to start fall 2025 and be completed by mid- to late-2026
 - Gag IA could be requested while the OA is in progress
 - SEFSC advises being sensitive to species in rebuilding plans



Council Goals: August 2023

- What to do about gag grouper?
 - Reduce fishing mortality on male gag
 - Constrain future harvests to the ACL
 - Increase the probability of rebuilding the stock
 - Avoid increasing discards
 - Reduce vulnerability of gag during spawning to increase spawning success
- What to do about black grouper?
 - Alleviate misidentification issues



Possible Management Alternatives...

- Recreational Bag Limit Reduction
- Recreational Vessel Limit
- Commercial Spawning Season Closure



Management Options: Recreational Bag Limit

- Current recreational bag limits:
 - Gag: 2 per person per day (pp/pd), within 4 grouper aggregate
 - Black Grouper: 4 pp/pd, within 4 grouper aggregate
- Halving the bag limit (e.g., 2 fish to 1 fish pp/pd) is not estimated to double the fishing season duration
 - Most fishermen don't catch the bag limit



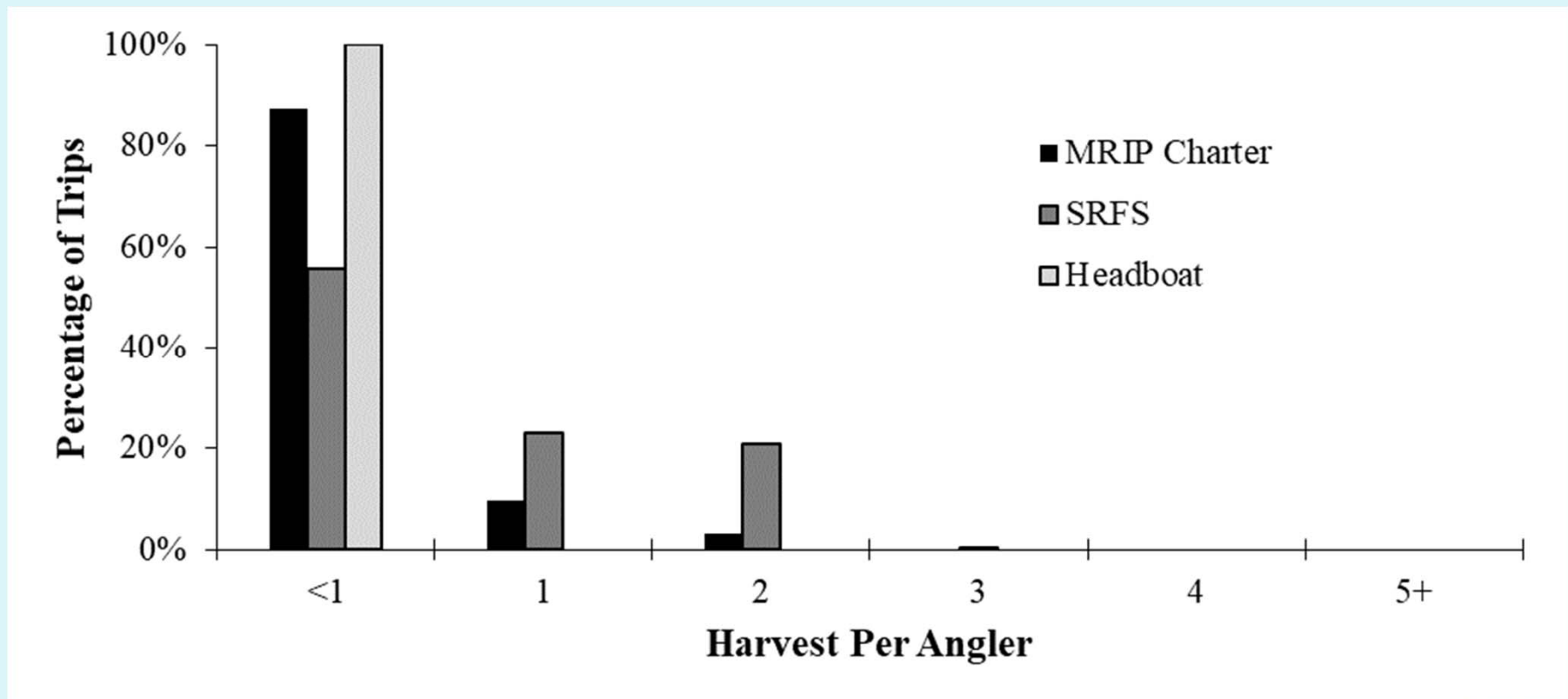
Management Options: Recreational Bag Limit

- Bag limit analysis:
- Years: 2020 to 2022
 - Southeast Region Headboat Survey (SRHS), headboats
 - MRIP-FES, for-hire
 - Shore mode excluded from graph - almost 100% ≤ 1 fish/person
 - SRFS, private vessel mode
 - N = 4,924 trips with gag
 - **Black grouper removed from bag limit action in August 2023**



Management Options: Recreational Bag Limit

- # gag harvest per angler, per trip:



- MRIP FES (n = 1,168 trips), SRFS (n = 397 trips), headboat (n = 3,359 trips)



Management Options: Recreational Bag Limit - Possibilities

- Reduce gag recreational bag limit to 1 fish per person per day:
 - No change for shore or headboat

Proposed Bag Limit (# of fish)	Private Vessel Predicted Change in Landings
2 pp/day	0%
1 pp/day	-22%



Management Options: Recreational Bag Limit - Possibilities

Action 1, Alternative 1: No Action (2 gag per person per day)					
Year	ACL*	ACT	Predicted Landings	Closure Date	Days Open
2024	288,000	230,000	1,003,531	Oct 19	49
2025	399,000	319,000		Nov 1	62
2026	499,000	399,000		Nov 8	69
2027	613,000	490,000		Nov 16	77
2028	751,000	600,000		Nov 25	87
Action 1, Alternative 2: Reduced bag limit (1 gag per person per day)					
Year	ACL*	ACT	Predicted Landings	Closure Date	Days Open
2024	288,000	230,000	796,486	Oct 28	58
2025	399,000	319,000		Nov 8	70
2026	499,000	399,000		Nov 17	78
2027	613,000	490,000		Nov 27	88
2028	751,000	600,000		Dec 9	101



Management Options: Recreational Bag Limit

Goal:	Reduce Recreational Bag Limit
Reduce F on males	NO
Avoid exceeding ACL	MAYBE
Improve odds of rebuilding	NO
Avoid increasing discards	NO
Reduce F in spawning season	N/A
Fix Black Grouper ID issues	NO

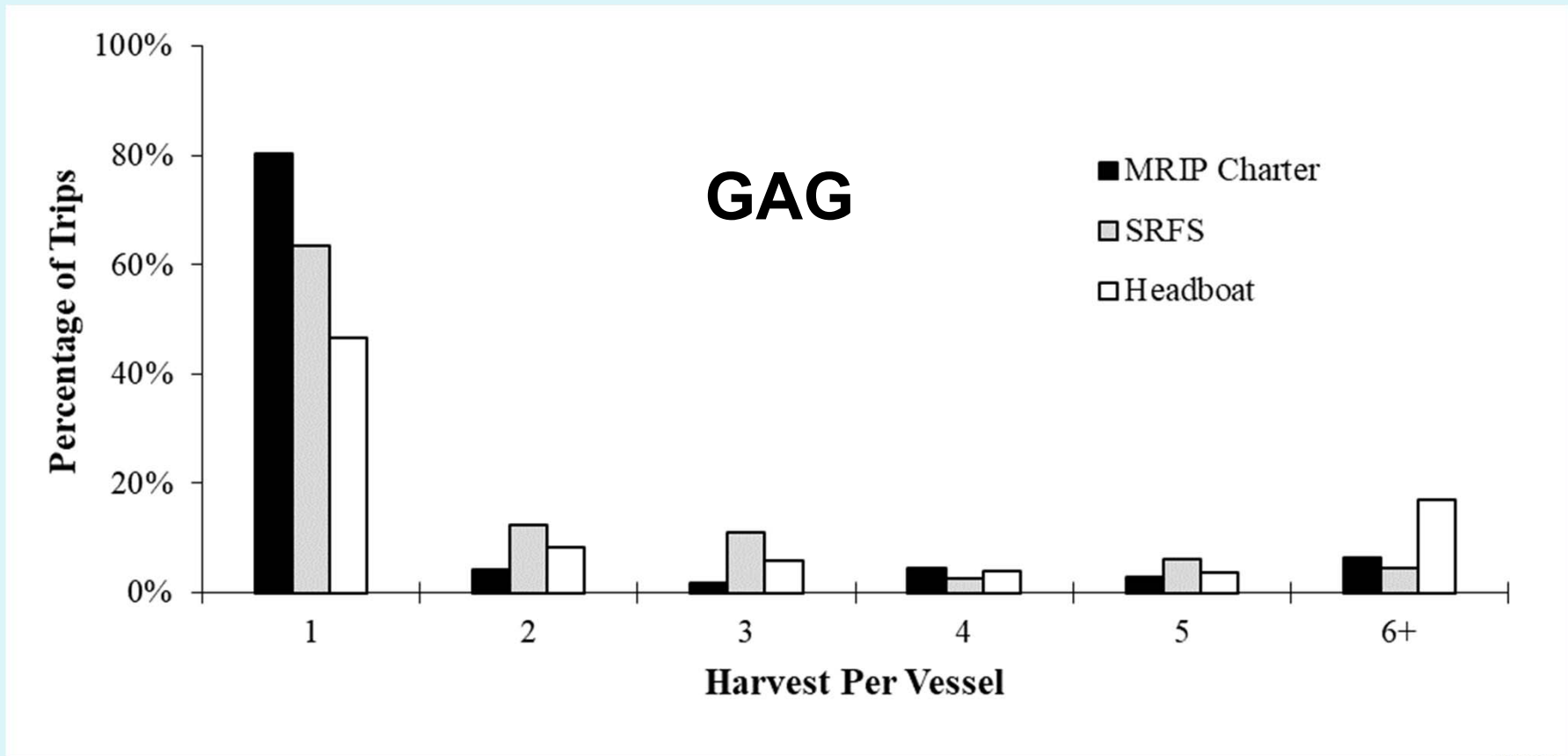


Management Options: Recreational Vessel Limit

- Vessel limit analysis for gag and black grouper:
- Years: 2020 to 2022
 - Southeast Region Headboat Survey (SRHS), headboats
 - MRIP-FES, for-hire
 - Shore mode excluded from analysis – no vessels
 - SRFS, private vessel mode
 - N = 4,924 trips with gag and 150 trips with black grouper



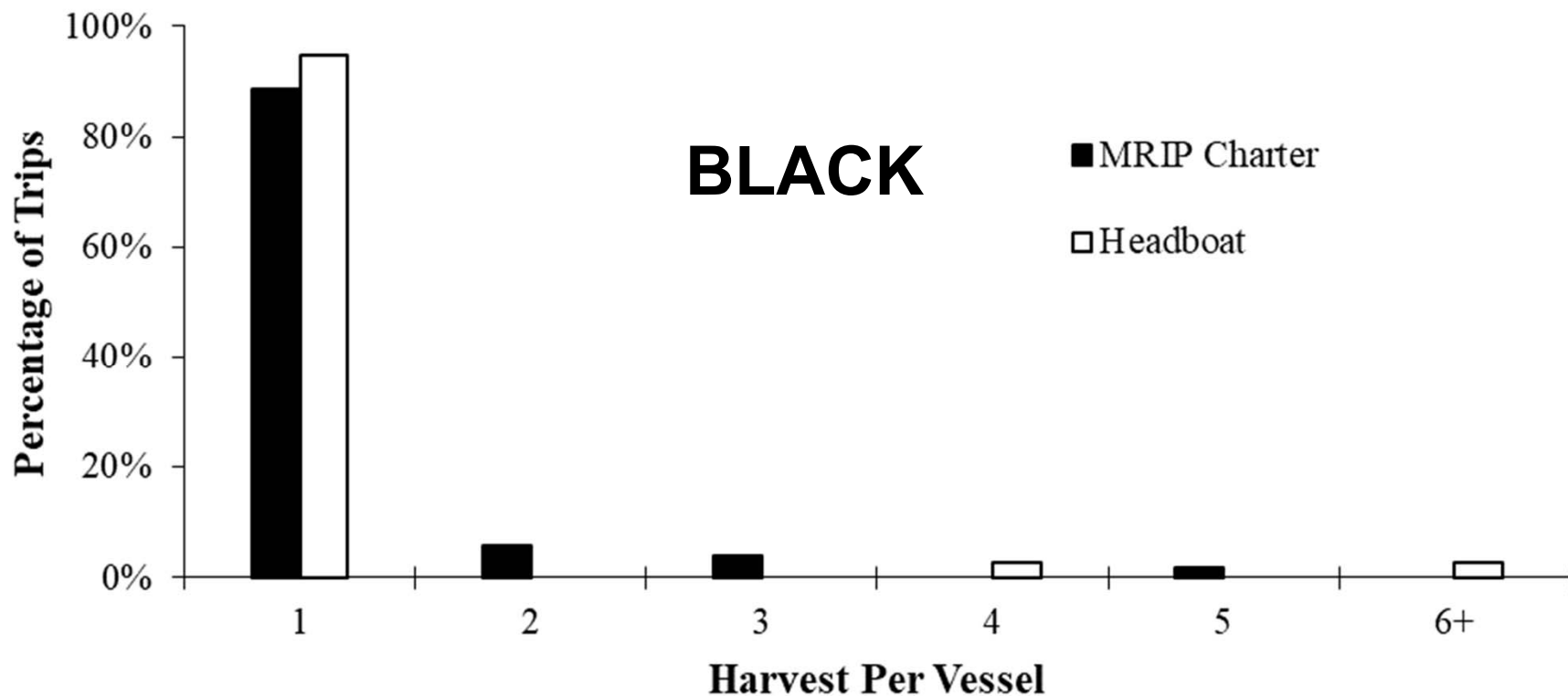
Management Options: Recreational Vessel Limit



- MRIP FES (n = 1,168 trips), SRFS (n = 397 trips), headboat (n = 3,359 trips) and TPWD (n = 6 trips)



Management Options: Recreational Vessel Limit



- MRIP FES (n = 1,168 trips), SRFS (n = 397 trips), headboat (n = 3,359 trips) and TPWD (n = 6 trips)



Management Options: Recreational Vessel Limit

Predicted % change in landings / trip of **Gulf gag** for the proposed vessel limits:

Proposed Vessel Limit	For-hire % Change in Landings	Private Vessel % Change in Landings	Headboat % Change in Landings
No limit	0%	0%	0%
4 fish per trip	-24%	-14%	-46%
3 fish per trip	-36%	-24%	-54%
2 fish per trip	-50%	-38%	-64%



Management Options: Recreational Vessel Limit

Predicted % change in landings / trip of **Gulf black grouper** for the proposed vessel limits:

Proposed Vessel Limit	For-hire % Change in Landings	Private Vessel % Change in Landings	Headboat % Change in Landings
No limit	0%	0%	0%
4 fish per trip	0%	0%	-18%
3 fish per trip	-2%	0%	-21%
2 fish per trip	-11%	0%	-25%



Management Options: Recreational Vessel Limit

Action 2, Alternative 1: No Action (No vessel limit)

Year	ACL*	ACT	Closure Date	Days Open
2024	288,000	230,000	Oct 19	49
2025	399,000	319,000	Nov 1	62
2026	499,000	399,000	Nov 8	69
2027	613,000	490,000	Nov 16	77
2028	751,000	600,000	Nov 26	87

Action 2, Alternative 2: Establish a 4 fish per vessel limit

Year	ACL*	ACT	Closure Date	Days Open
2024	288,000	230,000	Oct 26	56
2025	399,000	319,000	Nov 7	68
2026	499,000	399,000	Nov 15	76
2027	613,000	490,000	Nov 24	85
2028	751,000	600,000	Dec 6	97



Management Options: Recreational Vessel Limit

Action 2, Alternative 3: Establish a 3 fish per vessel limit

Year	ACL*	ACT	Closure Date	Days Open
2024	288,000	230,000	Nov 1	62
2025	399,000	319,000	Nov 11	72
2026	499,000	399,000	Nov 20	81
2027	613,000	490,000	Dec 1	92
2028	751,000	600,000	Dec 15	106

Action 2, Alternative 4: Establish a 2 fish per vessel limit

Year	ACL*	ACT	Closure Date	Days Open
2024	288,000	230,000	Nov 7	68
2025	399,000	319,000	Nov 20	81
2026	499,000	399,000	Dec 2	93
2027	613,000	490,000	Dec 15	106
2028	751,000	600,000	No Closure	122



Management Options: Recreational Vessel Limit

Goal:	Establish Recreational Vessel Limit
Reduce F on males	NO
Avoid exceeding ACL	MAYBE
Improve odds of rebuilding	NO
Avoid increasing discards	NO
Reduce F in spawning season	N/A
Fix Black Grouper ID issues	NO



Management Options: Commercial Spawning Season Closure

- Gag and black grouper managed under the Grouper-Tilefish IFQ program
 - Initial purpose included allowing commercial fishermen to fish when it was best for them to do so
 - Previous system of trip limits, seasons, and size limits was ineffective for fishermen, and increased regulatory discards
- Gag spawning peaks in February and March
- Black grouper spawning peaks from January – March
- Note: only FDM samples from spawning season come from commercial catch; recreational sector closed

Management Options: Commercial Closed Season

FMP category	Common name	Family	Scientific name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Coastal Migratory Pelagics	King Mackerel	Scombridae	<i>Scomberomorus cavalla</i>												
Coastal Migratory Pelagics	Spanish Mackerel	Scombridae	<i>Scomberomorus maculatus</i>												
Red Drum	Red Drum	Sciaenidae	<i>Sciaenops ocellatus</i>												
Reef Fish	Gray Triggerfish	Balistidae	<i>Balistes capriscus</i>												
Reef Fish	Greater Amberjack	Carangidae	<i>Seriola dumerili</i>												
Reef Fish	Almaco Jack	Carangidae	<i>Seriola rivoliana</i>												
Reef Fish	Speckled Hind	Epinephelidae	<i>Epinephelus drummondhayi</i>												
Reef Fish	Goliath Grouper	Epinephelidae	<i>Epinephelus itajara</i>												
Reef Fish	Red Grouper	Epinephelidae	<i>Epinephelus morio</i>												
Reef Fish	Nassau Grouper	Epinephelidae	<i>Epinephelus striatus</i>												
Reef Fish	Yellowedge Grouper	Epinephelidae	<i>Hyporthodus flavolimbatus</i>												
Reef Fish	Warsaw Grouper	Epinephelidae	<i>Hyporthodus nigritus</i>												
Reef Fish	Snowy Grouper	Epinephelidae	<i>Hyporthodus niveatus</i>												
Reef Fish	Black Grouper	Epinephelidae	<i>Mycteroperca bonaci</i>												
Reef Fish	Yellowmouth Grouper	Epinephelidae	<i>Mycteroperca interstitialis</i>												
Reef Fish	Gag Grouper	Epinephelidae	<i>Mycteroperca microlepis</i>												
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Reef Fish															
Not Federally															
Not Federally															
Not Federally															
Not Federally Managed	Sheepshead	Sparidae	<i>Archosargus probatocephalus</i>												
			Number species (all)	11	13	13	19	19	20	16	18	15	9	7	5
			Number species (peak)	3	5	10	9	8	8	8	7	4	2	1	3
				Q1			Q2			Q3			Q4		

SHELF Egg Project, showing peak (black) and prominent (gray) spawning by month for Gulf species

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Management Options: Commercial Closed Season

FMP category	Common name	Family	Scientific name	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Coastal Migratory Pelagics	King Mackerel	Scombridae	<i>Scomberomorus caeruleus</i>												
Coastal Migratory Pelagics	Spanish Mackerel	Scombridae	<i>Scomberomorus maculatus</i>												
Red Drum	Red Drum	Sciaenidae	<i>Sciaenops ocellatus</i>												
Reef Fish	Gray Triggerfish	Balistidae	<i>Balistes capriscus</i>												
Reef Fish	Greater Snook	Lutjanidae	<i>Lutjanus merli</i>												
Reef Fish	Almaco Jack	Sparidae	<i>Sparus olivaceus</i>												
Reef Fish	Speckled Hind	Epinephelidae	<i>Epinephelus drummondhayi</i>												
Reef Fish	Goliath Grouper	Epinephelidae	<i>Epinephelus itajara</i>												
Reef Fish	Red Grouper	Epinephelidae	<i>Epinephelus morio</i>												
Reef Fish	Nassau Grouper	Epinephelidae	<i>Epinephelus striatus</i>												
Reef Fish	Yellowedge Grouper	Epinephelidae	<i>Hyporthodus flavolimbatus</i>												
Reef Fish	Warsaw Grouper	Epinephelidae	<i>Hyporthodus nigritus</i>												
Reef Fish	Snowy Grouper	Epinephelidae	<i>Hyporthodus niveatus</i>												
Reef Fish	Black Grouper	Epinephelidae	<i>Mycteroperca bonaci</i>												
Reef Fish	Yellowmouth Grouper	Epinephelidae	<i>Mycteroperca interstitialis</i>												
Reef Fish	Gag Grouper	Epinephelidae	<i>Mycteroperca microlepis</i>												
Reef Fish	Scamp	Epinephelidae	<i>Mycteroperca phenax</i>												
Reef Fish	Yellowfin Grouper	Epinephelidae	<i>Mycteroperca venenosa</i>												
Reef Fish	Hogfish	Labridae	<i>Lachnolaimus maximus</i>												
Reef Fish	Mutton Snapper	Lutjanidae	<i>Lutjanus analis</i>												
Reef Fish	Red Snapper	Lutjanidae	<i>Lutjanus campechanus</i>												
Reef Fish	Cubera Snapper	Lutjanidae	<i>Lutjanus cyanopterus</i>												
Reef Fish	Vermilion Snapper	Lutjanidae	<i>Rhomboplites aurorubens</i>												
Reef Fish	Tilefish	Malacanthidae	<i>Lopholatilus chamaeleonticeps</i>												
Not Federally Managed	Southern Flounder	Paralichthyidae	<i>Paralichthys lethostigma</i>												
Not Federally Managed	Spotted Seatrout	Sciaenidae	<i>Cynoscion nebulosus</i>												
Not Federally Managed	Black Drum	Sciaenidae	<i>Pogonias cromis</i>												
Not Federally Managed	Sheepshead	Sparidae	<i>Archosargus probatocephalus</i>												
Number species (all)				11	13	13	19	19	20	16	18	15	9	7	5
Number species (peak)				3	5	10	9	8	8	8	7	4	2	1	3
				Q1			Q2			Q3			Q4		

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Management Options: Commercial Closed Season - Possibilities

- A note about The Edges:
 - Closed seasonally, from January – April
 - Recent research showed 0% male gag (n = 140)
- Stress-induced ovarian “plugs”:
 - Form under severe stress in mature female spawning fish
 - E.g., fishing, environmental stress, predatory stress
 - Can prevent a mature female from spawning for the rest of that spawning season
 - Plugs thought to eventually dissolve before next spawning season



Management Options: Commercial Closed Season - Possibilities

- Stress-induced ovarian “plugs”:



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Management Options: Commercial Closed Season

Goal:	Establish Commercial Spawning Season Closure
Reduce F on males	NO
Avoid exceeding ACL	NO
Improve odds of rebuilding	NO
Avoid increasing discards	NO
Reduce F in spawning season	YES
Fix Black Grouper ID issues	NO



Complete Decision Matrix: What we think we know

Goal:	Reduce Recreational Bag Limit	Establish Recreational Vessel Limit	Establish Commercial Spawning Season Closure
Reduce F on males	NO	NO	NO
Avoid exceeding ACL	MAYBE	MAYBE	NO
Improve odds of rebuilding	NO	NO	NO
Avoid increasing discards	NO	NO	NO
Reduce F in spawning season	N/A	N/A	YES
Fix Black Grouper ID issues	NO	NO	NO

Questions?

