

Socio-economic Profile of the South Atlantic Snapper Grouper Fishery: Overview

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Overview of Presentation

- Background and Timeline
- Main Topics
- Data and Methods
- Key Findings
- Next Steps



Background on the Project

- Council and Snapper Grouper Advisory Panel requested an in-depth profile of the commercial fishery as part of the Snapper Grouper Vision Blueprint
- Input from AP, Council and SEP
- Analysis conducted October 2017 – January 2018
- First draft under internal SAFMC review
- Presentation to SAFMC in March 2018

Project Goals

- Community/Area summaries
 - 9 areas
- Detailed analysis of SG permits, permit holders and permitted vessels
 - Number of permits by area and changes over time
 - Business structure
 - Permit portfolios
 - How to obtain permits (price, leasing etc)
 - Retired permits
 - Length of time permits are held
 - Vessel characteristics
 - Landings on permits

Project Goals con't

- Participation
 - Details on number of trips, vessels and days at sea by year and area
 - Catch portfolios, trip types
- Snapper Grouper Landings
 - Total landings and revenue over time
 - Landings and revenue by species or complex
 - Landings and revenue by gear type

Data and Methods

- Data

- Permit records from 1998 through 2016
- Commercial logbook data from 1998 through 2016
- Accumulated Landings System (ALS) data

- Methods

- Descriptive statistics
- Two-mode network analysis and network metrics (permit and catch portfolios)

Key Findings: Permits and Permit Holders

- Highest number of permits in Florida, specifically Florida Keys
- Number of corporate permits has increased, but most permits are held by individuals or families
- Permit portfolios mostly include commercial dolphin-wahoo and Spanish mackerel, with many also having limited entry commercial king mackerel permits
- About 1/3 of vessels also have federal charter permits
- Current cost to obtain a SG1 permit: \$60,000 - \$80,000
 - Price has increased about 50% since 2011
- Annual lease of SG1 permit: \$6,000 to \$8,000

Key Findings: Permits and Permit Holders

- Since implementation of limited entry, 45% of SG1 permits are retired, and 67% of SG2 permits are retired
- 60% of SG1 permits have had same permit holder for >10 years; about 30% are original permit holder
- Very few (<5%) SG1 and SG2 permits have zero snapper grouper landings from 2012 through 2016
- SG Landings every year 2012-2016 :
 - 45% SG1
 - 30% SG2

Key Findings: Permitted Vessels

— Florida vessels

- 20-30 ft
- Built in 1970s or 1980s
- 201-400 hp
- Fiberglass, ice for refrigeration

— North Carolina, South Carolina and Georgia vessels

- 30-40 ft
- Built in 1980s or 1990s
 - NC has the highest number of newer vessels (2000s)
- 201-400 hp
- Fiberglass, ice for refrigeration

Key Findings: Participation

- Participation has been consistent 2012 through 2016
- Participation has decreased since 2001, except for North Florida and Central Florida
- Participation in northern areas is highest in the Season 2; middle areas in Seasons 1 and 2; southern areas consistent all year
- Northern NC, Central NC and Florida areas typically have 1-day trips with 1-2 crew
- Southern NC, South Carolina and Georgia have longer trips (3-5 days) with 2-3 crew

Key Findings: Catch Portfolios

Areas: NC/SC/GA, Florida East Coast, and Florida Keys

Each season:

- Primary and secondary species were identified for each season
 - Primary species → driving species for trips
 - Secondary species → other species caught on trips
- Trip types
- Annual portfolios



Photo credit: Amber Von Harten

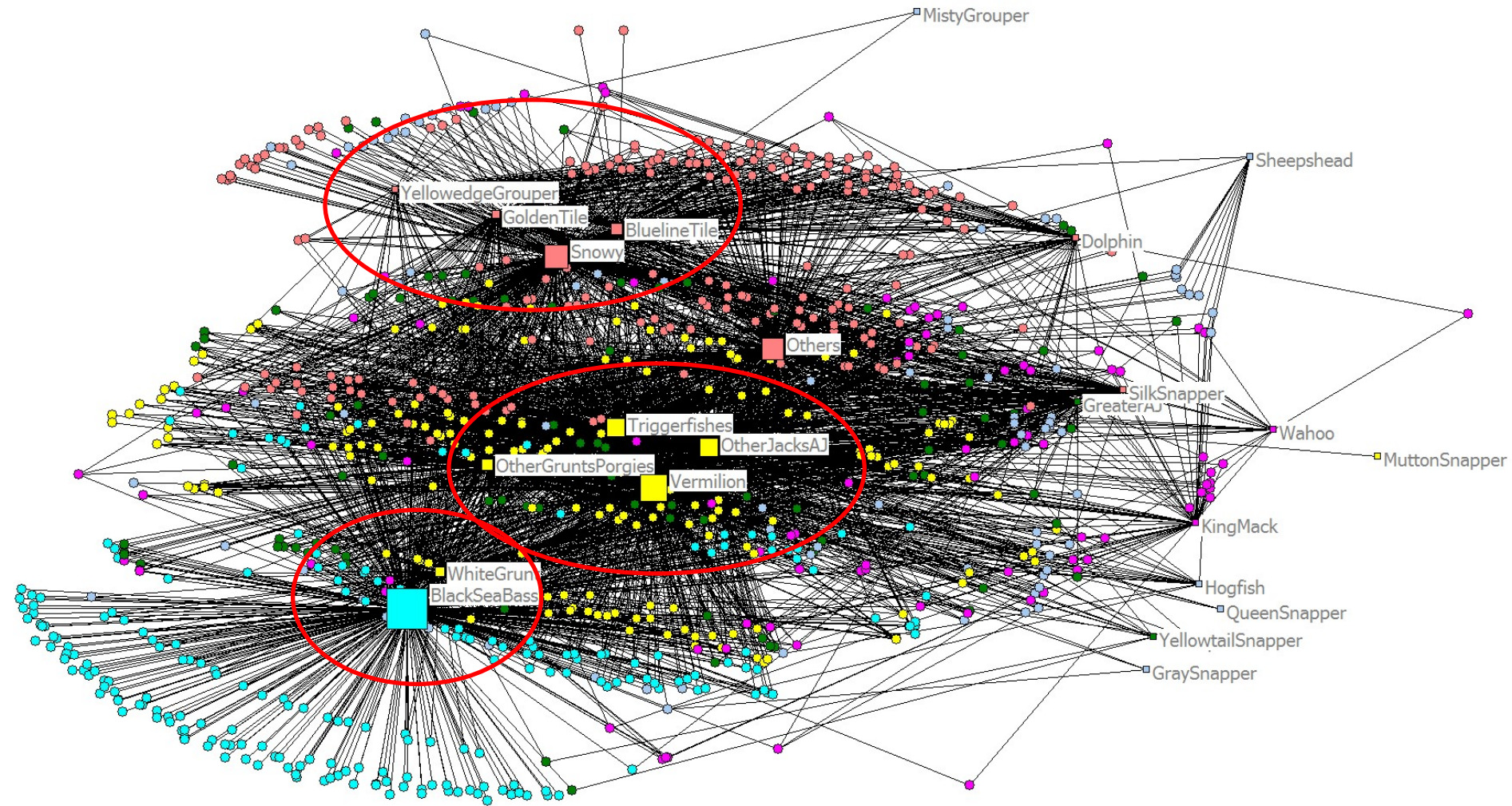
Key Findings: Catch Portfolios

North Carolina, South Carolina, Georgia Trip Types – 2016 data

Season 1 (January – April)	Season 2 (May – August)	Season 3 (September - December)
1 – Black sea bass driven Main sp: Black sea bass Main Gear: Electric, some H&L 2 – Core Snapper Grouper Main spp: Vermilion, Gray Triggerfish, Jacks Complex, Grunts Main Gear: Electric 3 - Deepwater Main spp: Snowy grouper, 'Other species', Blueline tilefish, Golden tilefish, Yellowedge grouper Main Gear: Electric, some longline	1 – Core Snapper Grouper Main spp: Black sea bass, Gag, Red porgy, 'Other Species', Vermilion, Gray triggerfish, Greater amberjack Main Gear: Mostly Electric, some H&L 2 - Blueline tilefish driven Main spp: Blueline tilefish Main Gear: Electric and longline 3 – Deepwater Main sp: Snowy grouper Main Gear: Electric	1 – Core Snapper Grouper Main spp: Gray triggerfish, Red porgy, 'Other species' Main Gear: Electric 2 – Black sea bass and gag driven Main sp: Black sea bass Main Gear: Electric and H&L, some Trap

**Not all trips fit into the typology

Key Findings: Catch Portfolios

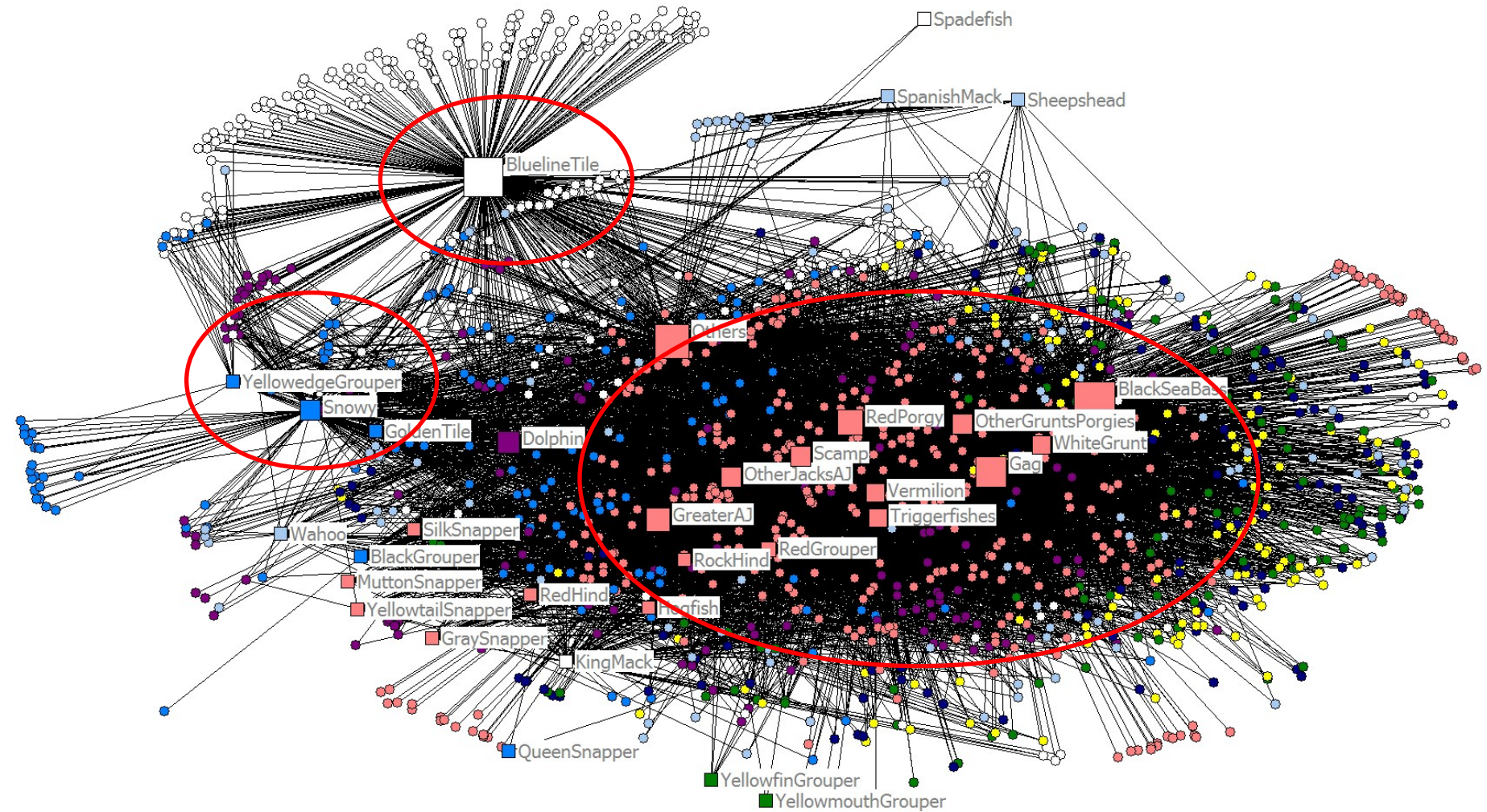


NC/SC/GA 2016 Season 1

Circle: Fishing trip

Square: Species

Key Findings: Catch Portfolios



NC/SC/GA 2016 Season 2

Circle: Fishing trip

Square: Species

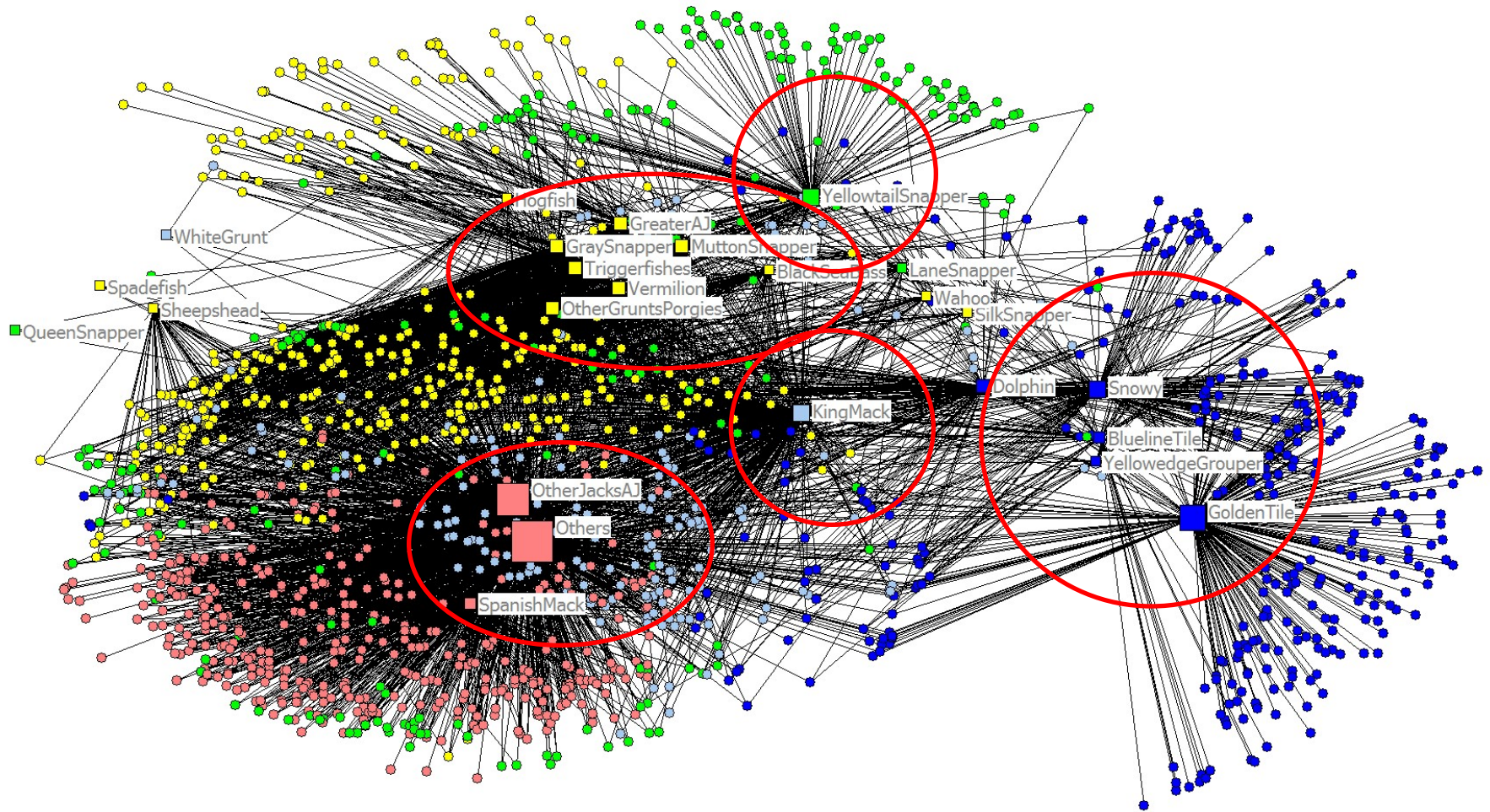
Key Findings: Catch Portfolios

Florida East Coast Trip Types – 2016 data

Season 1 (January – April)	Season 2 (May – August)	Season 3 (September - December)
1 – Core Snapper Grouper Main spp: Vermilion, Gray triggerfish, Mutton snapper, Gray snapper, Greater amberjack, Hogfish Main Gear: Electric or Hook and line	1 – Greater amberjack driven Main spp: Greater amberjack, Jacks complex, core snapper grouper Main Gear: Electric or Hook and line	1 – Core Snapper Grouper Main spp: Shallow water species, Vermilion, Gray triggerfish, Scamp Main Gear: Electric or Hook and line
2 - Yellowtail snapper driven Main spp: Yellowtail snapper Main Gear: Hook and line	2 - Yellowtail snapper driven Main sp: Yellowtail snapper Main Gear: Hook and line	2 - Yellowtail snapper driven Main sp: Yellowtail snapper Main Gear: Hook and line
3 - Golden tilefish driven Main sp: Golden tilefish Main Gear: Longline, some Electric and Hook and line	3 – Mutton snapper driven Main sp: Mutton snapper Main Gear: Hook and line or trolling	3 - Golden tilefish driven Main sp: Golden tilefish Main Gear: Electric and some H&L
4 - Jacks Main spp: Other species, Jacks complex Main Gear: Hook and line	4 – Non-Snapper grouper driven Main sp: Other species, king mackerel Main Gear: Hook and line or trolling	4 – Non-Snapper grouper driven Main sp: Other species, Spanish mackerel Main Gear: Hook and line or trolling
5 – King Mackerel driven Main spp: King mackerel Main Gear: Hook and line or Trolling		

**Not all trips fit into the typology

Key Findings: Catch Portfolios



Florida East Coast 2016 Season 1

Circle: Fishing trip

Square: Species

Key Findings: Catch Portfolios

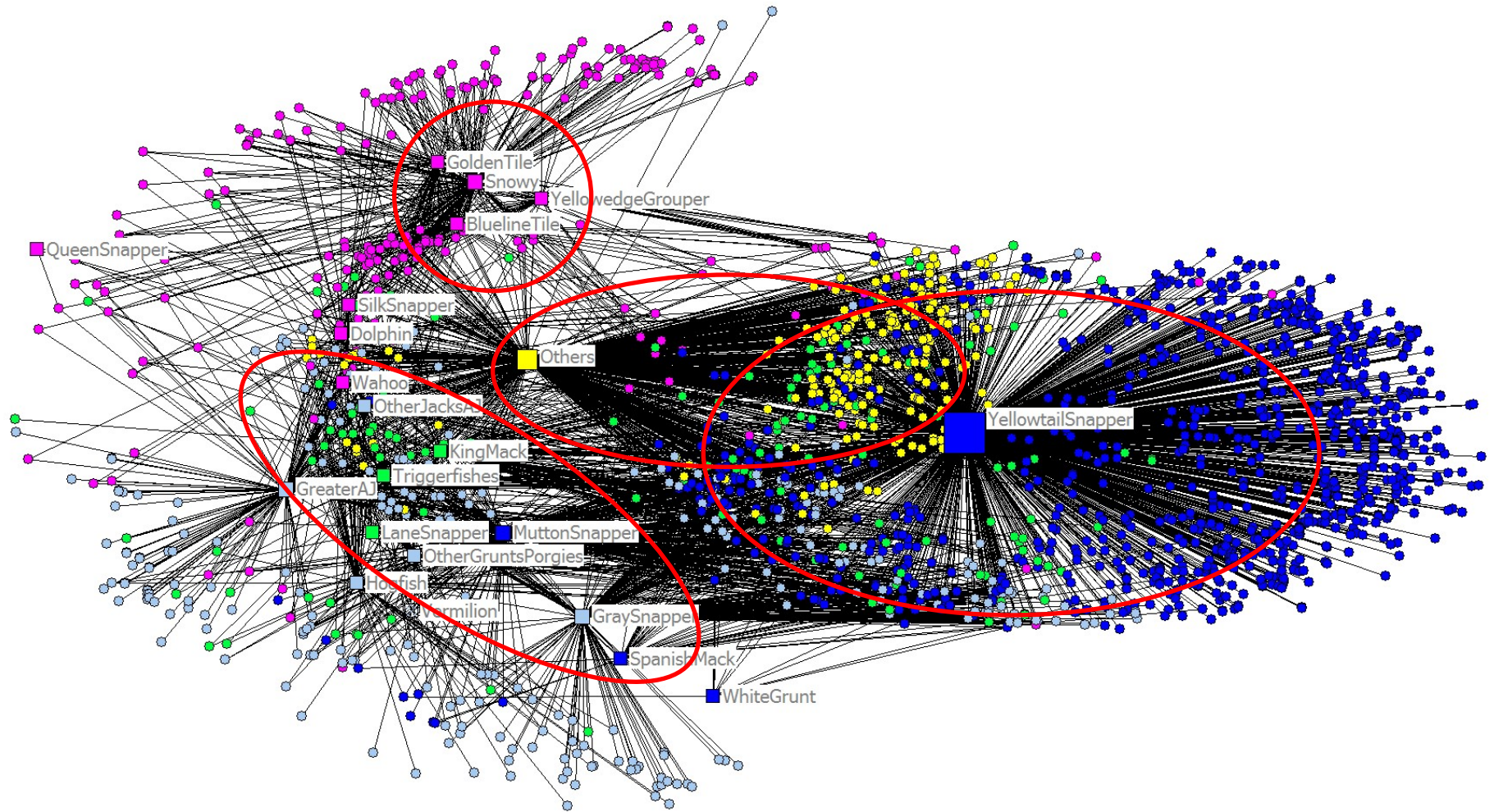
Florida Keys Trip Types – 2016 data

Season 1 (January – April)	Season 2 (May – July)	Season 3 (August - December)
1 - Yellowtail snapper driven Main sp: Yellowtail snapper, Other species Main Gear: Hook and line 2 - Deepwater Main spp: Snowy grouper, Blueline tilefish, Golden tilefish, Yellowedge grouper Main Gear: Electric 3 - Non-snapper grouper driven Main spp: Other species, Yellowtail snapper Main Gear: Hook and line 4 – Core Snapper Grouper Main spp: Mutton snapper, Gray snapper, Gray triggerfish, Greater amberjack Main Gear: Hook and line	1 - Yellowtail snapper driven Main sp: Yellowtail snapper Main Gear: Hook and line 2 – Greater amberjack driven Main sp: Greater amberjack Main Gear: Hook and line 3 – Gray snapper driven Main sp: Gray snapper Main Gear: Hook and line or Trolling 4 – Core Snapper Grouper Main spp: Mutton snapper, Shallow-water groupers Main Gear: Hook and line 5 - Deepwater Main spp: Snowy grouper, Blueline tilefish, Golden tilefish, Yellowedge grouper Main Gear: Electric	1 - Yellowtail snapper driven Main sp: Yellowtail snapper Main Gear: Hook and line 2 –Core Snapper Grouper Main spp: Shallow water species, Hogfish, Mutton snapper, Gray Triggerfish, Other species Main Gear: Hook and line or Other 3 – Deepwater Main spp: Blueline tilefish, Golden tilefish, Yellowedge grouper Main Gear: Electric

**Not all trips fit into the typology

***Different seasons for Florida Keys

Key Findings: Catch Portfolios



Florida Keys 2016 Season 1

Circle: Fishing trip

Square: Species

Key Findings: Annual Portfolios

Common annual catch portfolios for North Carolina, South Carolina and Georgia in 2016

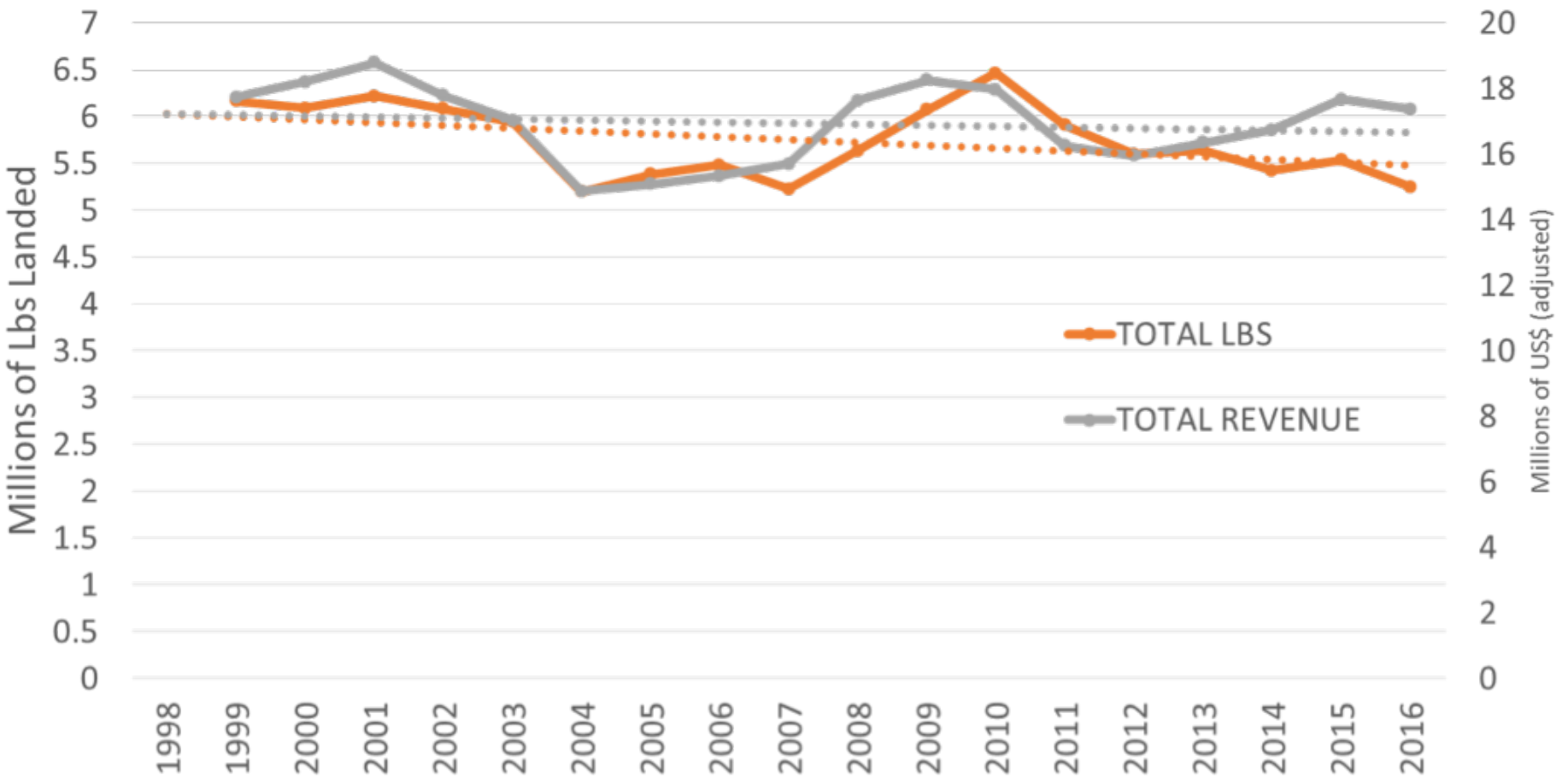
Portfolio	Season 1	Season 2	Season 3
A	Core SG- Vermilion	Core SG- Black sea bass/Gag/ Red porgy	Black sea bass/ Gag or Core SG- Gray triggerfish
B	Black sea bass	Core SG- Black sea bass/Gag/ Red porgy	Black sea bass/ Gag or Core SG- Gray triggerfish
C	Deepwater- Snowy grouper	Core SG- Black sea bass/Gag/ Red porgy or Deepwater- Snowy grouper	Core SG- Gray triggerfish
D	Deepwater- Snowy grouper (minimal)	Blueline tilefish	Core SG- Gray triggerfish or None

Key Findings: Annual Portfolios

Common annual catch portfolios for Florida Keys in 2016

Portfolio	Season 1	Season 2	Season 3
A	Yellowtail Snapper	Yellowtail Snapper	Yellowtail Snapper
B	Greater Amberjack	Greater Amberjack or Core SG- Mutton snapper, Shallow-water groupers	Core SG- Shallow-water species, Hogfish, Mutton snapper, Gray Triggerfish, Other species
C	Deepwater	Deepwater- Snowy grouper	Core SG- Shallow-water species, Hogfish, Mutton snapper, Gray Triggerfish, Other species or None

Key Findings: Landings and Revenue



Total commercial landings of snapper grouper species and total revenue (adjusted for inflation) for the South Atlantic region from 1998 through 2016

Next steps

- Review and revisions
- Presentation to Council and AP
- Additional analysis and data collection possible



Photo credit: Hannah Miller



Photo credit: Amber Von Harten