

Black Sea Bass



SSC Meeting
July 17, 2018

Outline



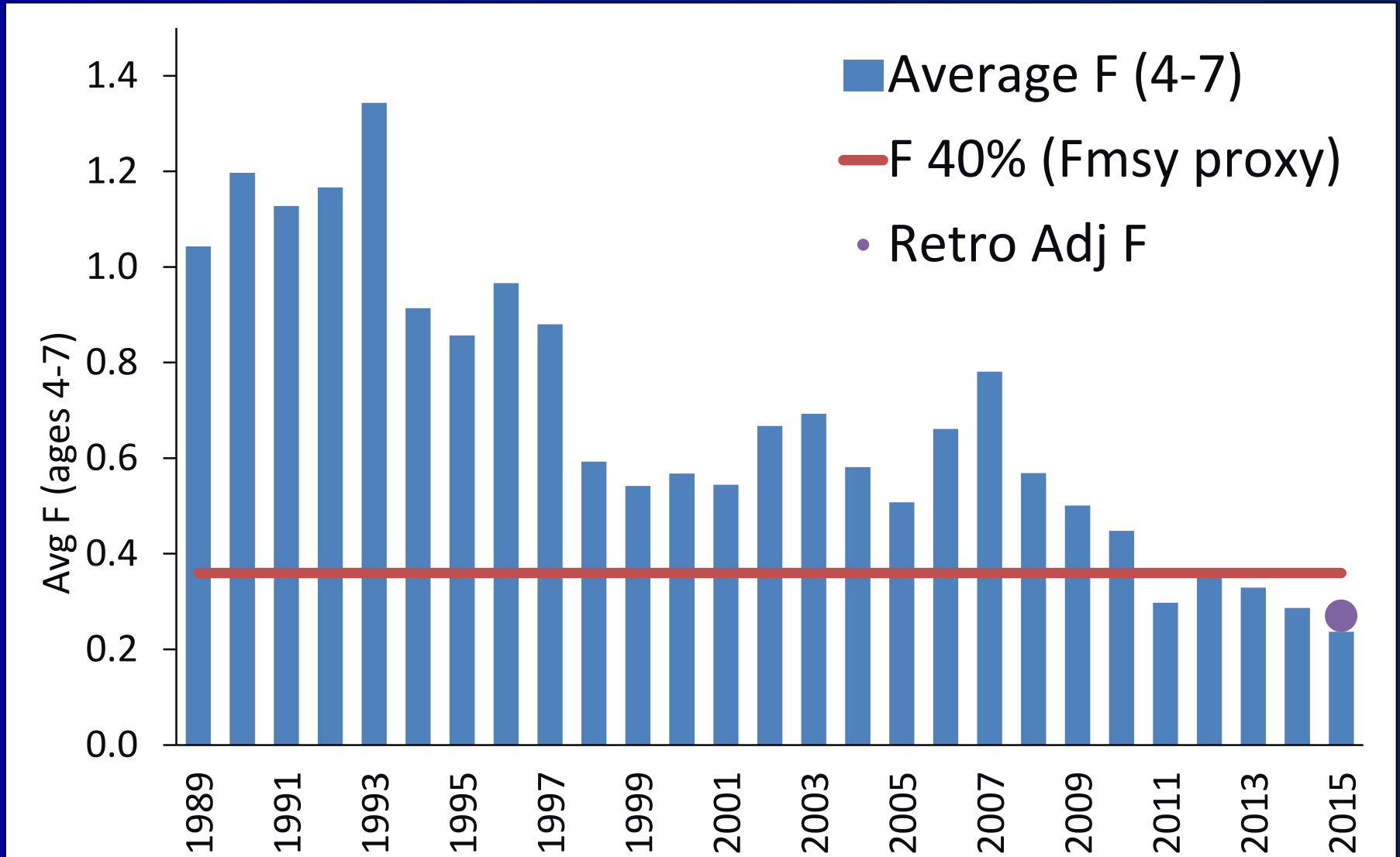
- Stock status
- Fishery performance
- AP comments
- Review 2019 ABC

Stock Status



- Last benchmark stock assessment: 2016 benchmark (SAW/SARC 62)
 - Successful addressing prior assessment concerns and uncertainties
 - Modeled as two separate sub-units (North and South) divided at approximately Hudson Canyon
 - Data through 2015

Fishing Mortality

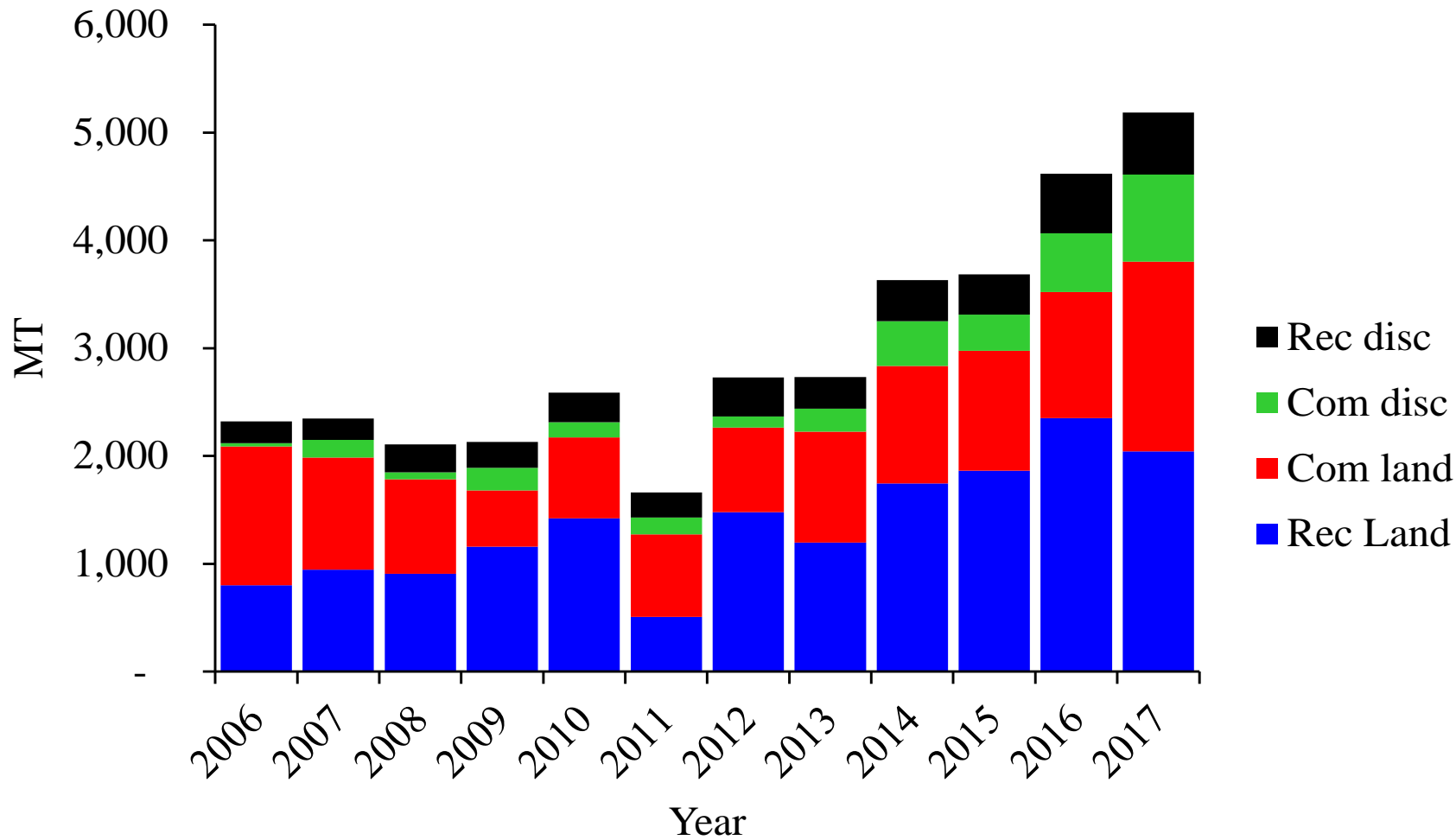


SSB, Recruitment



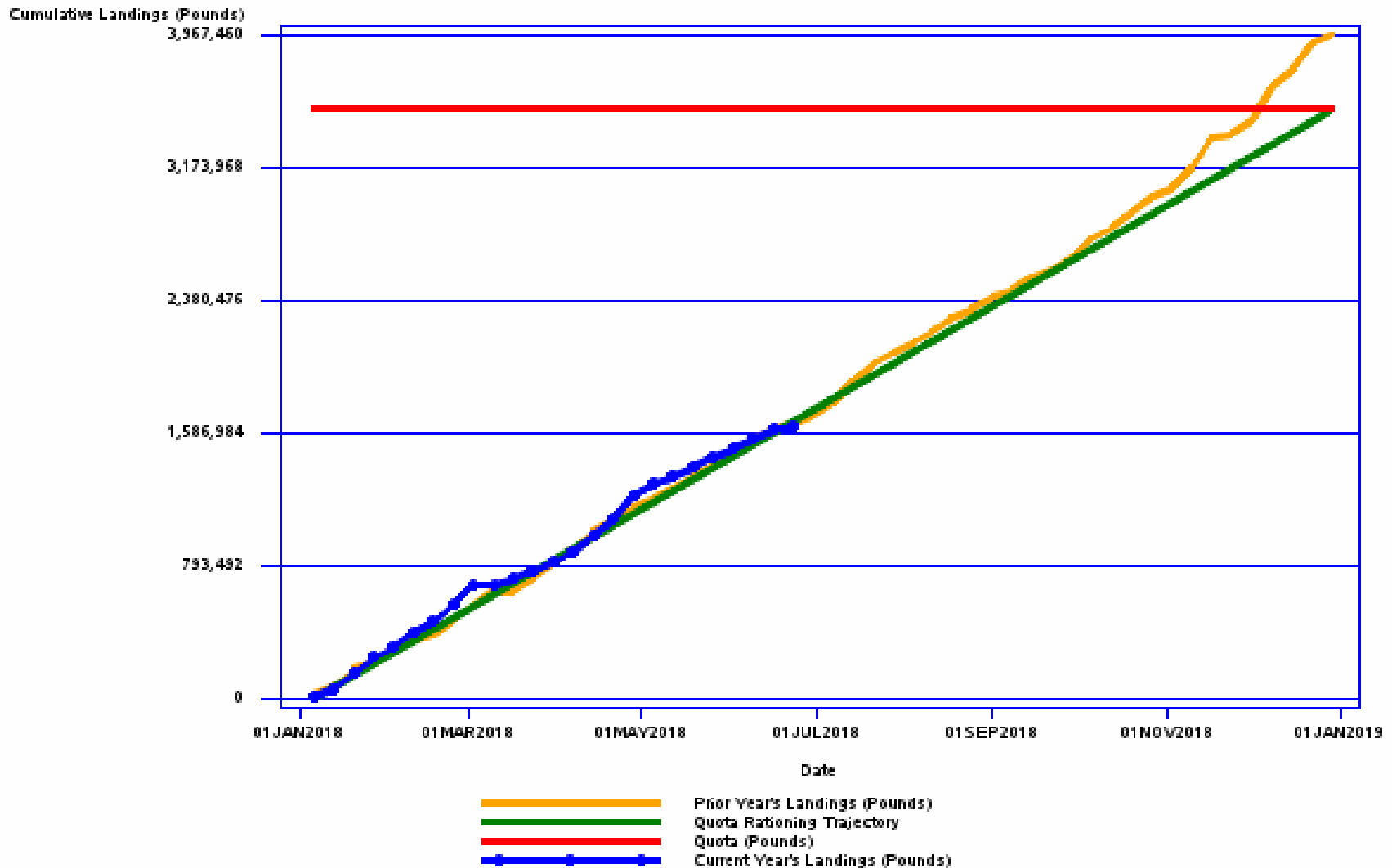
2018 Data Update

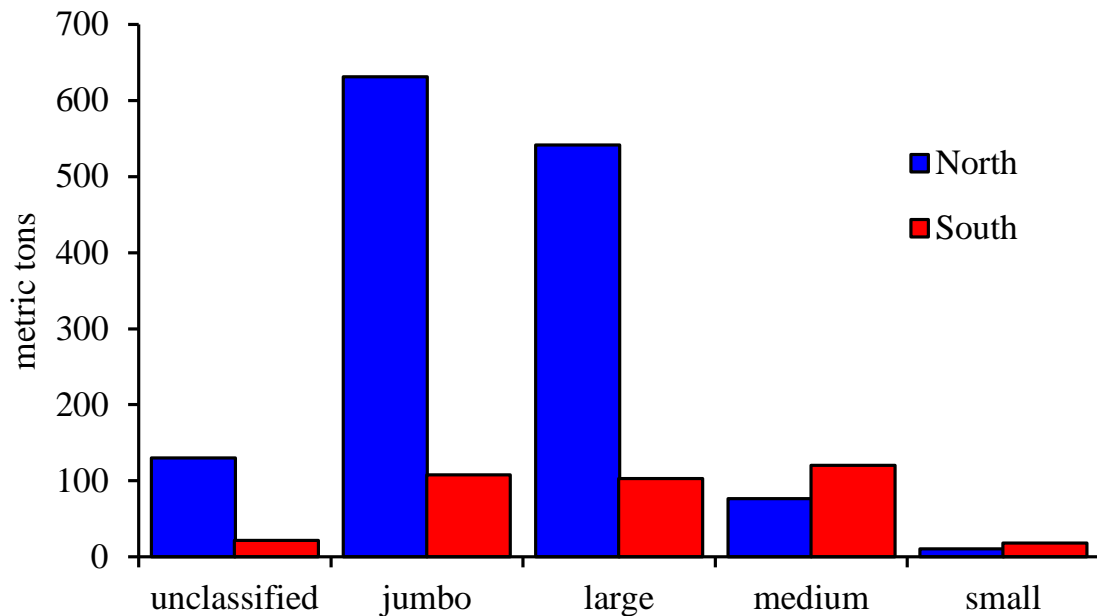
- 2011 year class remains dominant in fisheries and surveys in N region
- 2015 year class appears above avg in many N & S surveys and fishery discards
- 2017 com. landings highest since at least 1982 (1,761 mt/3.88 mil lb)
- Most com. landings from stat areas off NY-DE. Most com. discards from S region
- Most rec. landings, discards occurred in N



2018 Commercial Landings

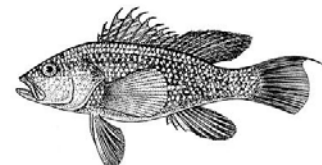
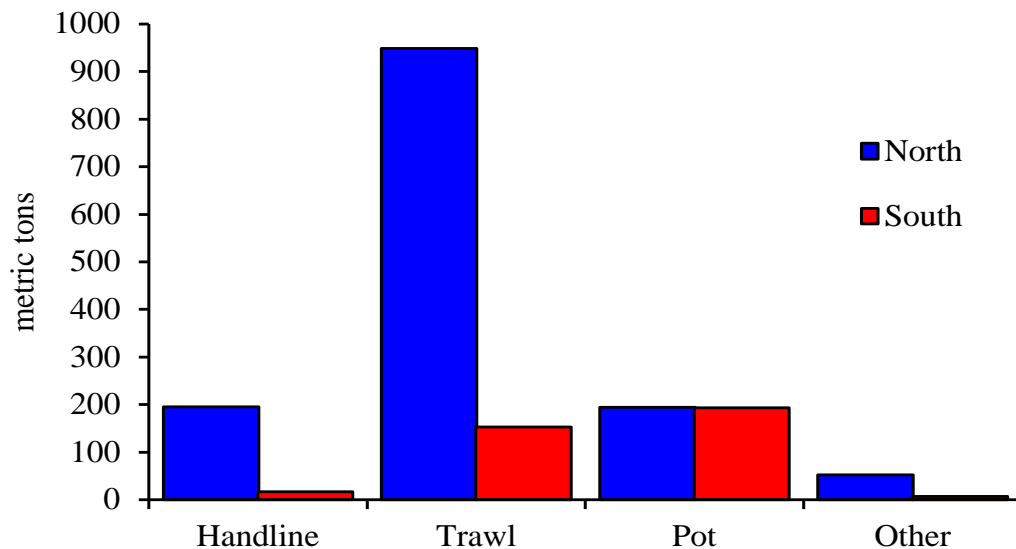
Black Sea Bass Quota Monitoring Report

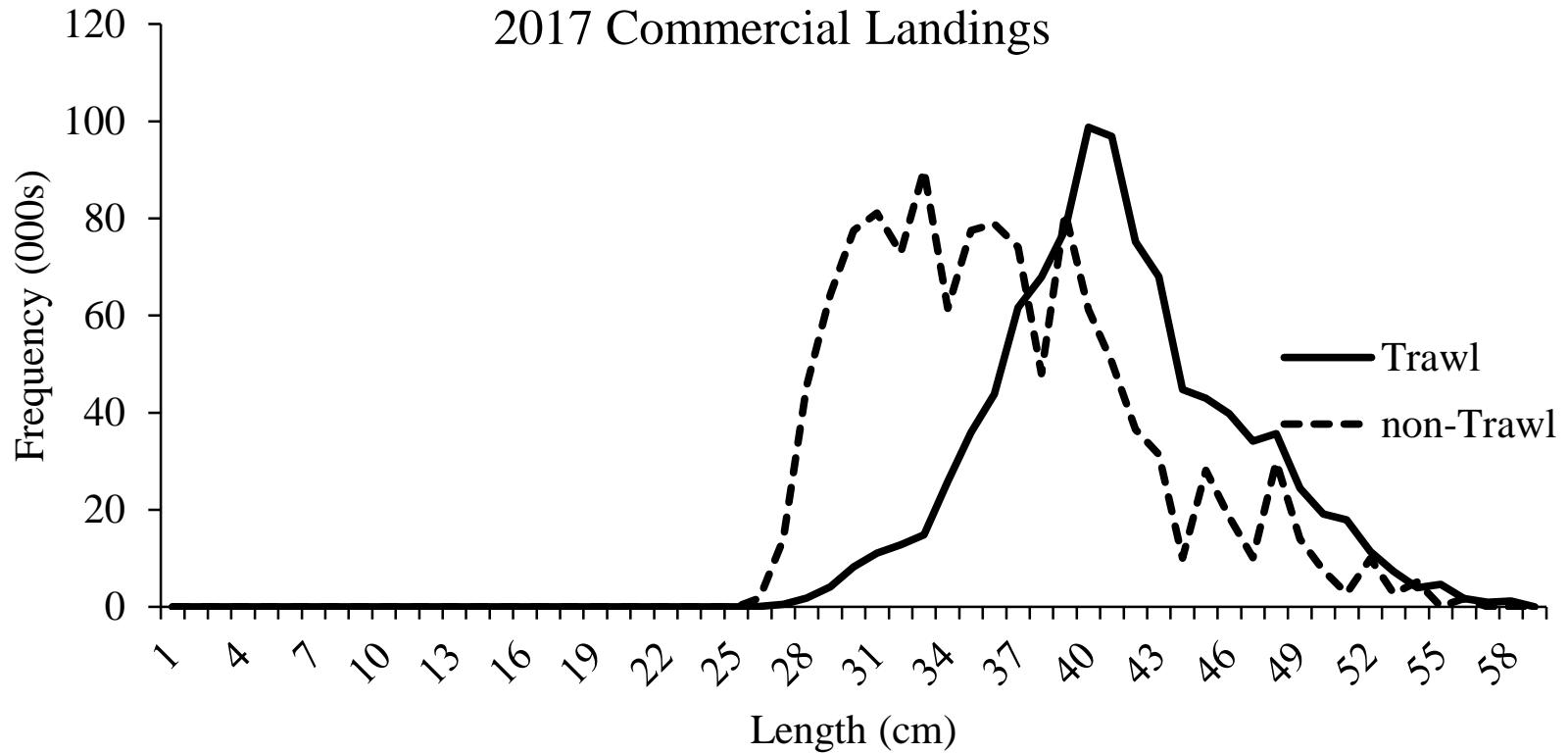




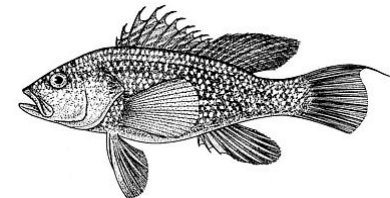
2017 commercial landings by region and market category

2017 commercial landings by region and gear type

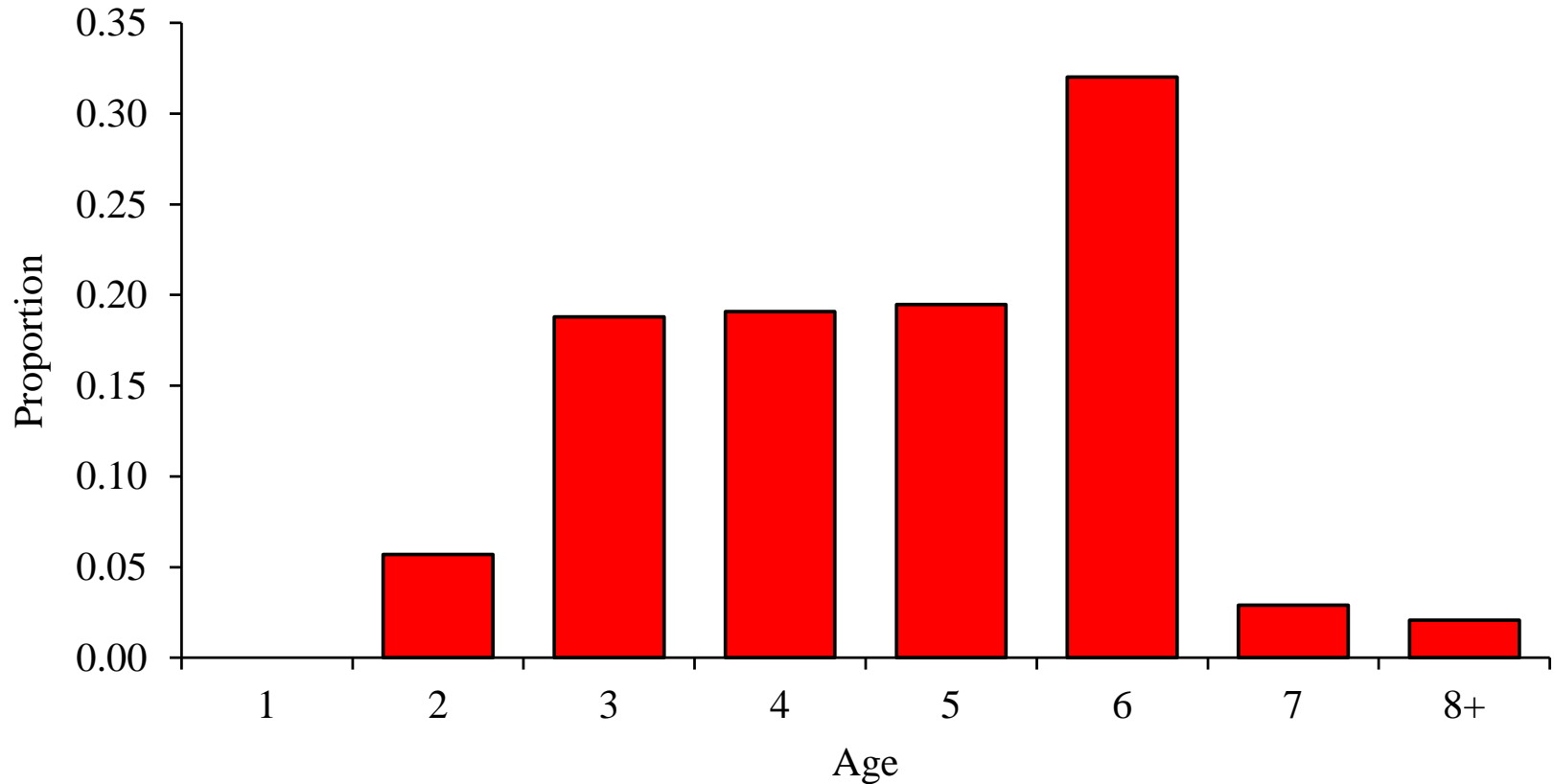




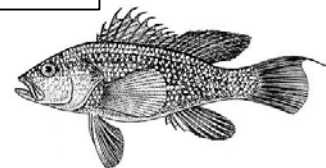
Length (cm) frequency of 2017 commercial landings by gear category.

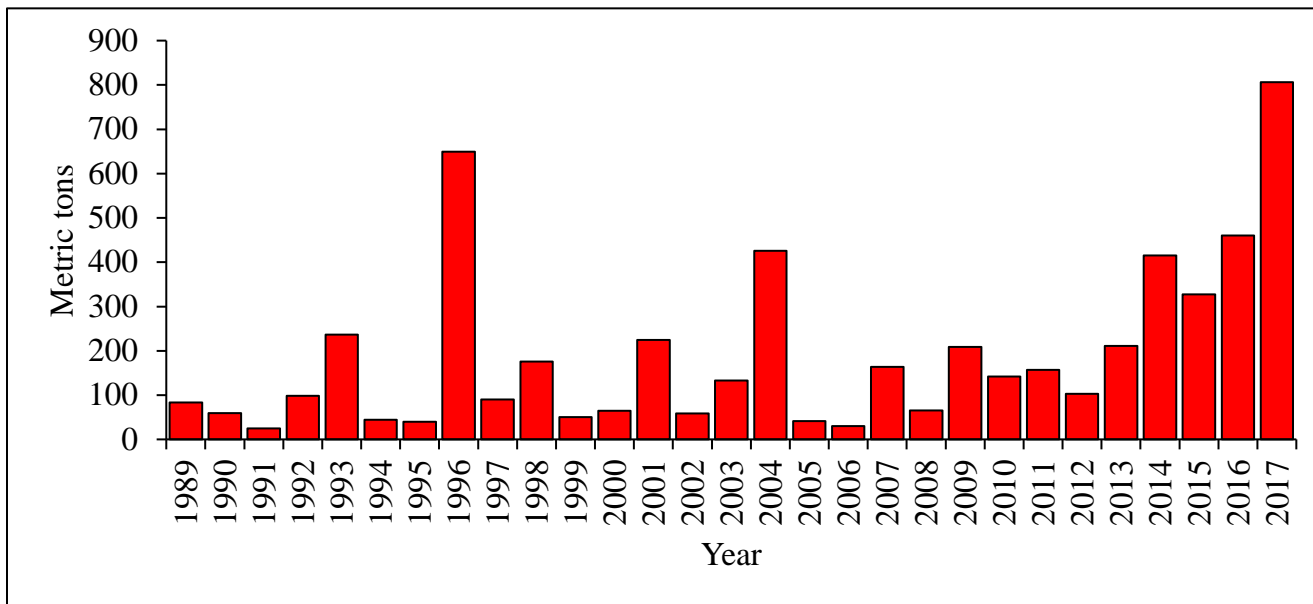


2017 Commercial Landings Age Comp



**Age composition of 2017
commercial landings**

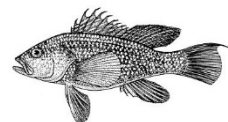




Commercial discards (mortalities) 1989-2017

2017 commercial discards (mortalities) by gear type and region

2017	Source	NEGEAR	MT
NORTH	OBS	Otter trawl	224.1
	VTR	Handline	5.2
	VTR	Fish pots	7.0
	VTR	Other pots	1.4
SOUTH	OBS	Otter trawl	560.1
	OBS	Gillnet	5.8
	VTR	Handline	0.3
	VTR	Fish pots	1.7
	VTR	Other pots	0.3
TOTAL			805.9

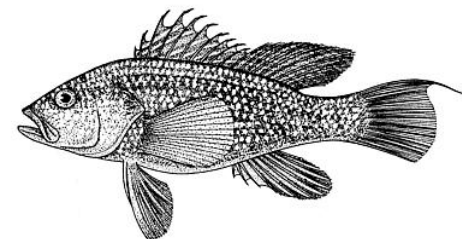


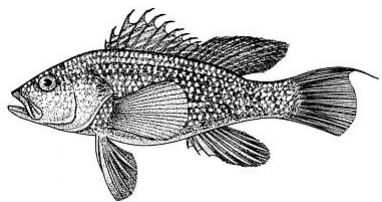
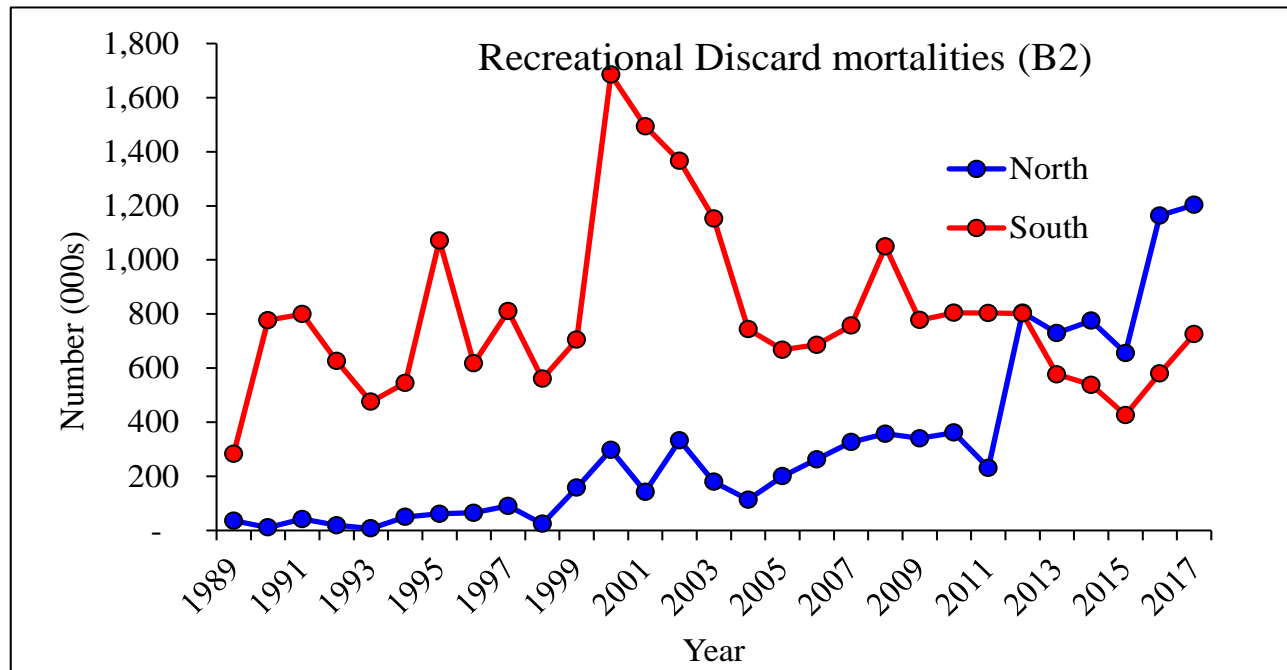
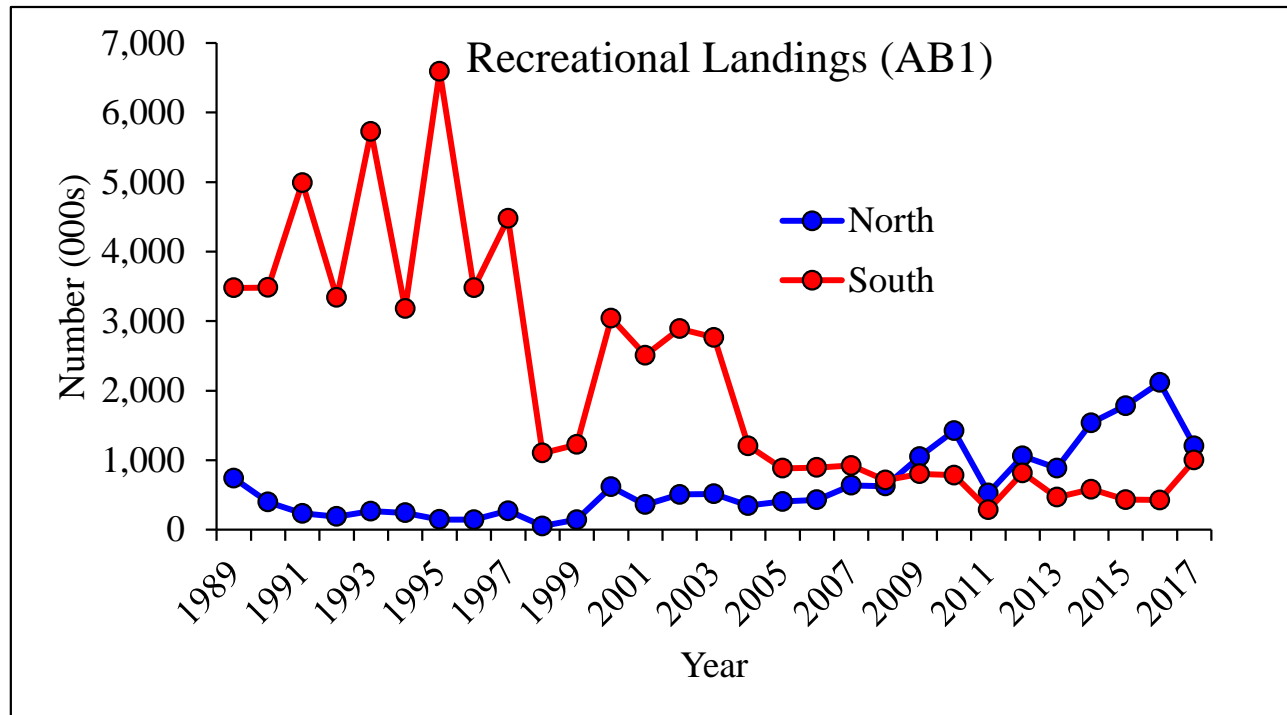
Commercial Discards

Recent increases in observer coverage for pot fisheries allows alternative estimates of discards than VTRs

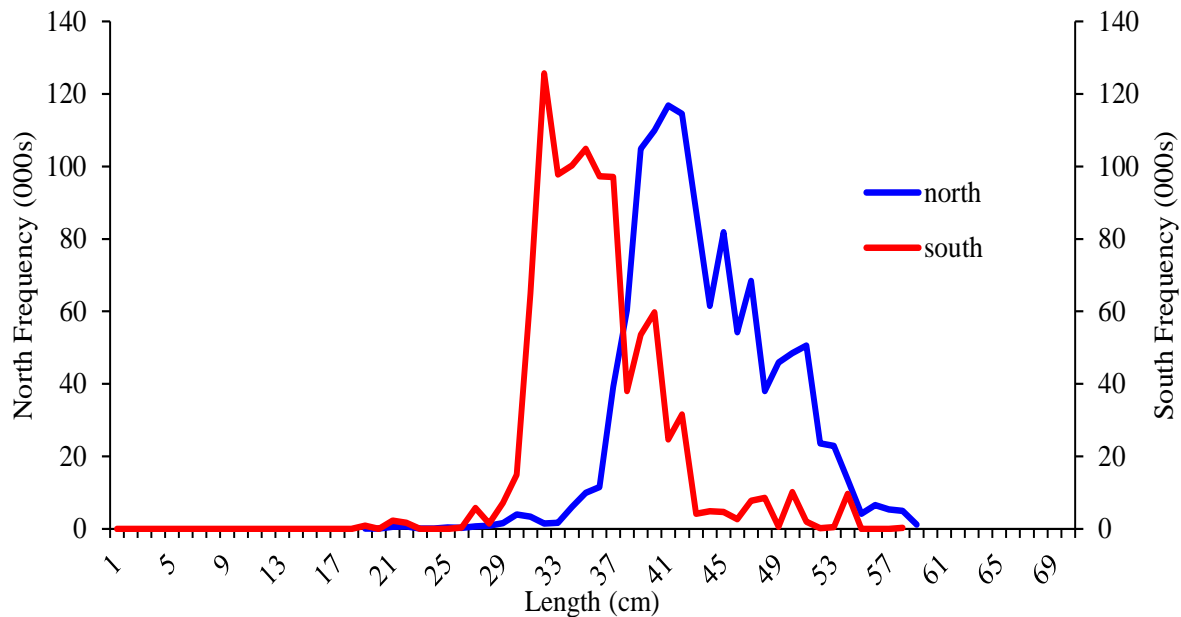
alternative 2017

2017	Source	NEGEAR	MT
NORTH	OBS	Otter trawl	224.1
	VTR	Handline	5.2
	VTR	Fish pots	7.0
	VTR	Other pots	1.4
SOUTH	OBS	Otter trawl	560.1
	OBS	Gillnet	5.8
	VTR	Handline	0.3
	OBS	Fish pots	599.1
	OBS	Other pots	110.2
TOTAL			1513.1



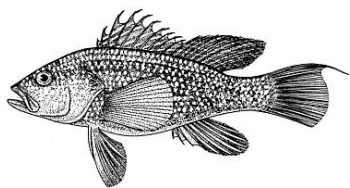
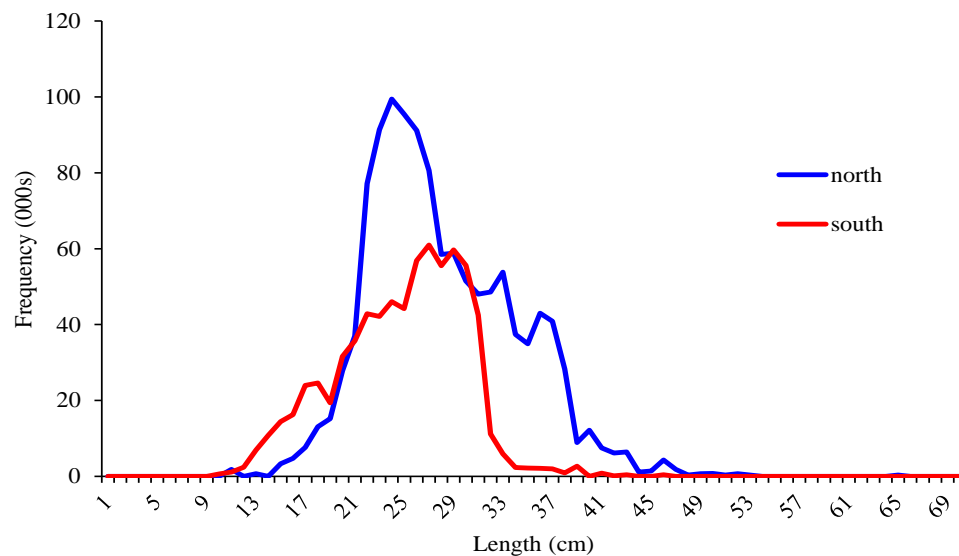


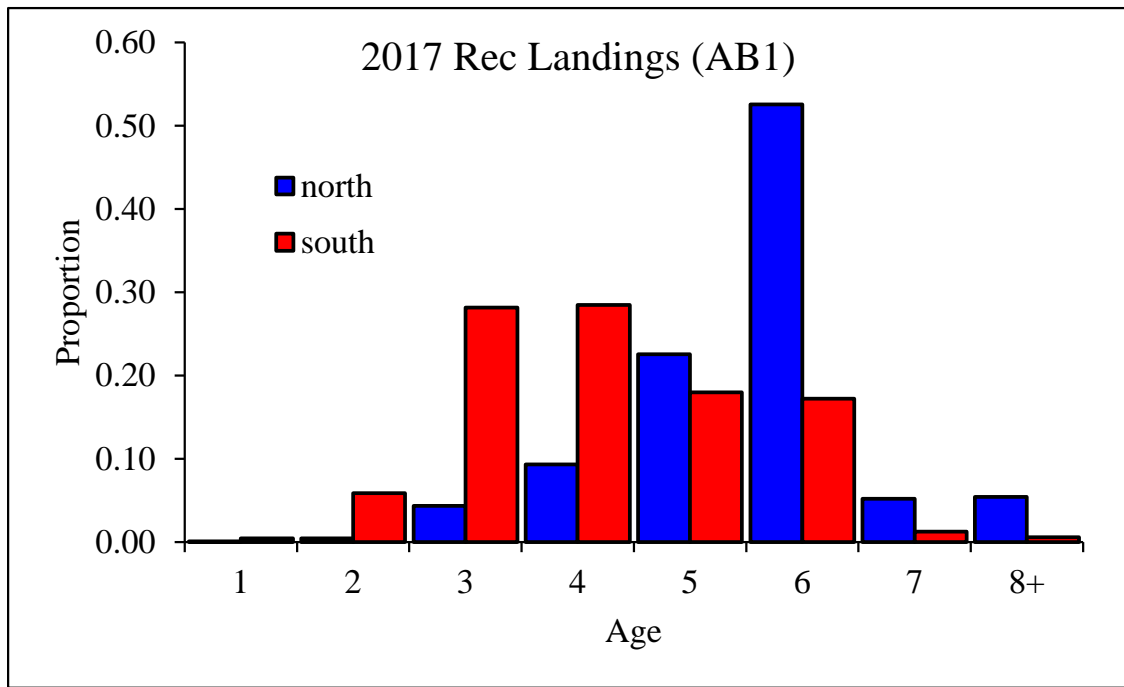
Total AB1 Harvest



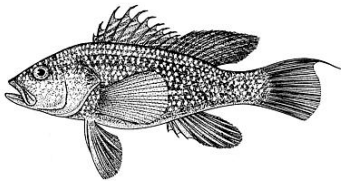
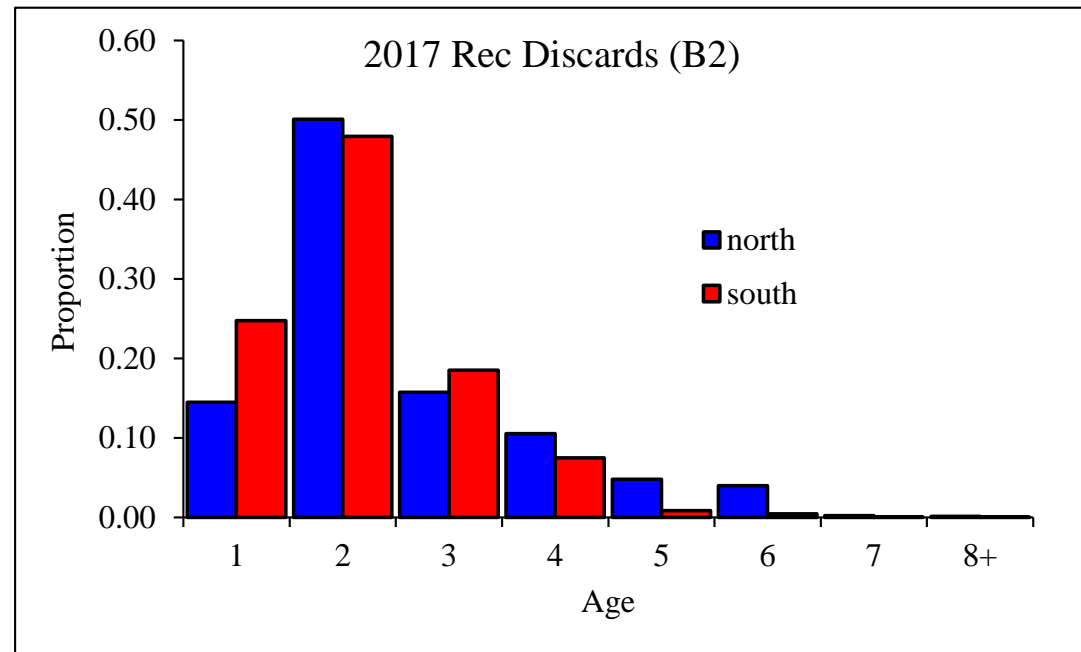
**2017 recreational
catch length
frequencies
by region**

Total B2 Catch





**2017
recreational
catch
age frequencies
by region**



Commercial Quotas & Landings

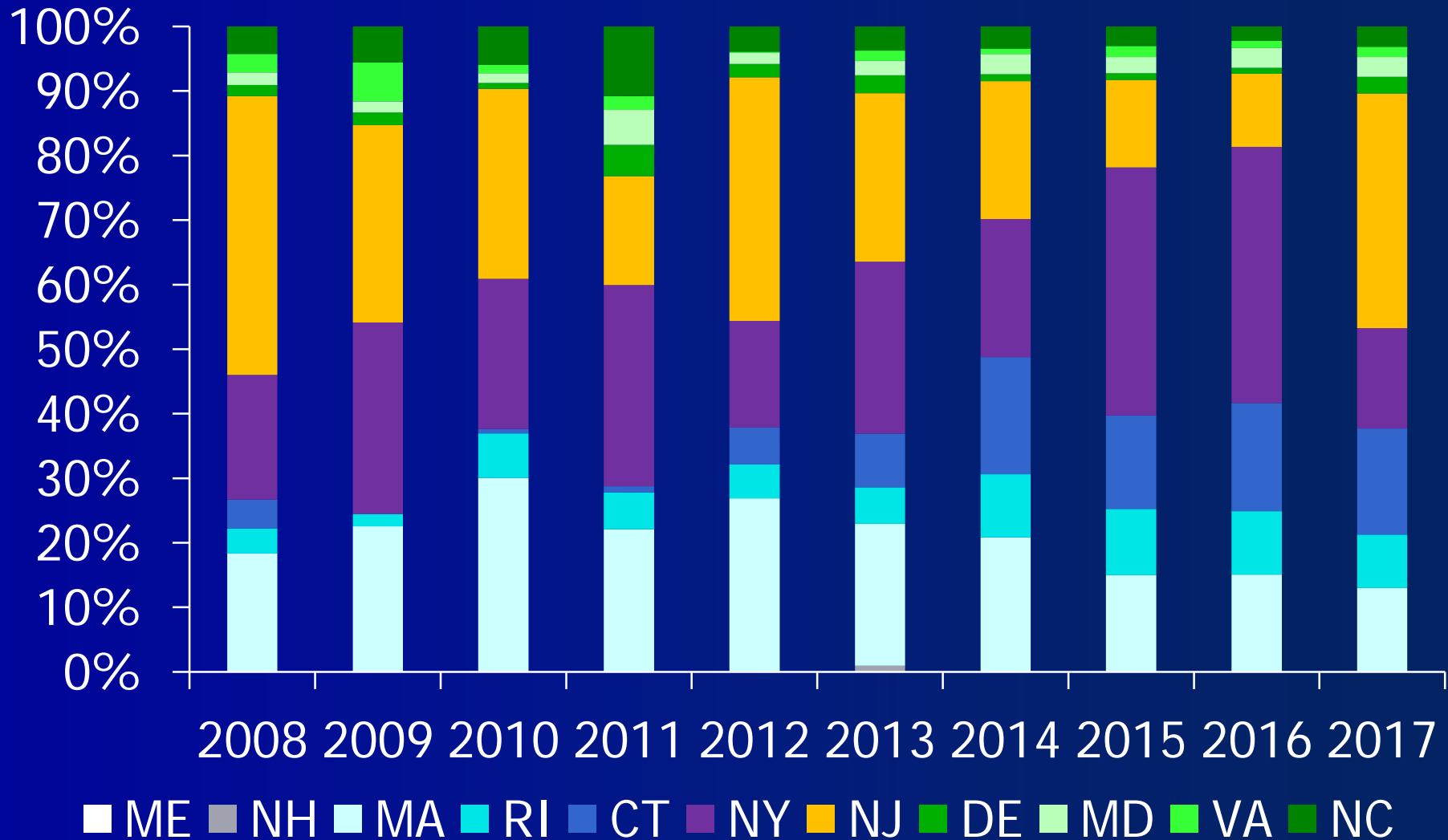


Year	Quota (mil lb)	Landings (mil lb)	% of quota landed
2013	2.17	2.26	104%
2014	2.17	2.18	100%
2015	2.21	2.29	104%
2016	2.71	2.59	96%
2017	4.12	3.99	97%
2018	3.52	--	--

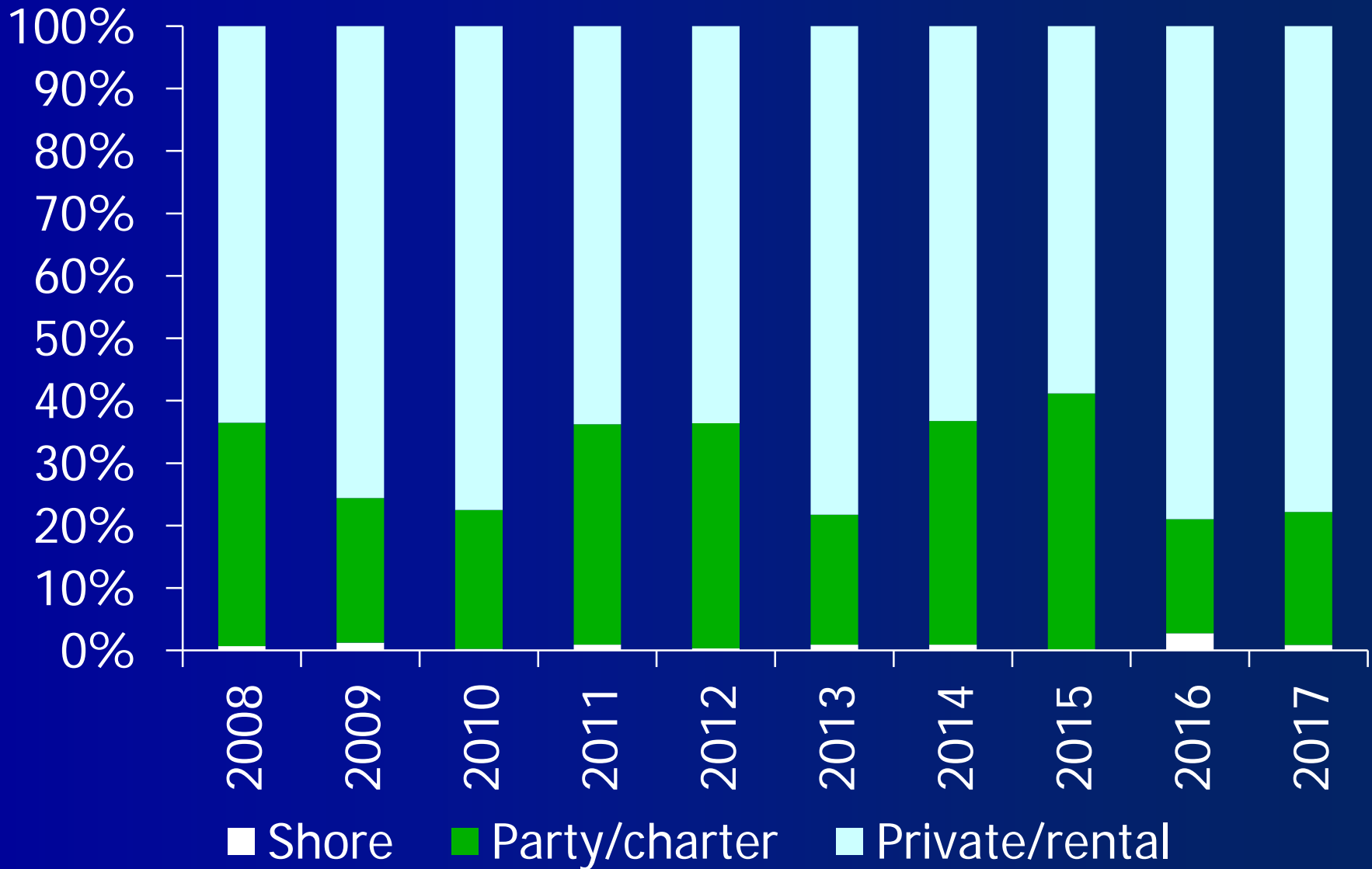
RHLs & Rec. Harvest

Year	RHL (millions of lb)	Harvest (millions of lb)	% of RHL harvested
2013	2.26	2.46	109%
2014	2.26	3.60	159%
2015	2.33	3.79	163%
2016	2.82	5.19	184%
2017	4.29	3.93	92%
2018	3.66	--	--

Recreational Harvest by State



Recreational Harvest by Mode



AP Comments

- MRIP data inaccurate, should be replaced with reporting via smart phone app
- Predictability, stability in regulations needed
- Concerns about trawl survey data
- RSA should be used to fund research
- Research should be done on hook sizes, gear configurations to reduce discard mortality
- Council and Board don't listen to AP input

AP Comments

- BSB range has expanded – negative impacts lobster, clam, and other fisheries
- Catch limits should be increased to address these negative impacts
- Abundance is cyclical
- Winters and springs are colder –seasonal patterns of landings have changed
- Research recommendation – why are BSB moving into new areas?

AP Comments

- Council should modify risk policy to allow more harvest, given biomass $>2x$ target
- Frustration that ABC is declining from 2018-2019 even though biomass is $>2x$ target and 2015 year class is above avg

AP Comments

- Bottom trawls tend to catch bigger fish and have accounted for a greater proportion of landings over time
- Dealers pay more per pound for bigger fish – shift towards trawl gear may have impacted overage avg price
- Markets are generally stable but mid-year change in 2017 quota flooded the market and caused prices to drop

AP Comments

- Frustration with current restrictive recreational management measures
- High discard rate is troubling
- Challenges with managing in lb vs #s
 - With increasing min. size limits anglers can keep fewer fish
 - RHL more easily exceeded
 - Higher discards

AP Comments

- Should consider different bag limits for private and for-hire
- Southern states don't have same diversity of rec. species as northern states – BSB very important for VA
- Non-compliance is an issue in some areas
- High rec. catches suggest stock is bigger than we think

AP Comments (Email)

- Issues with varied regulations by state
- Consider requiring venting
- Consider male-only rec. fishery
- Research on survival at different depths

2017-2019 OFLs, ABCs

- Projections from 2016 benchmark assessment
 - OFL projections assumed:
 - ABC would be caught in 2016
 - F in 2016 & 2017 = F_{MSY}
- SSC modified OFL CV = 60%
- Risk policy – typical life history ($p^* = 40\%$)

2017-2019 OFLs and ABCs



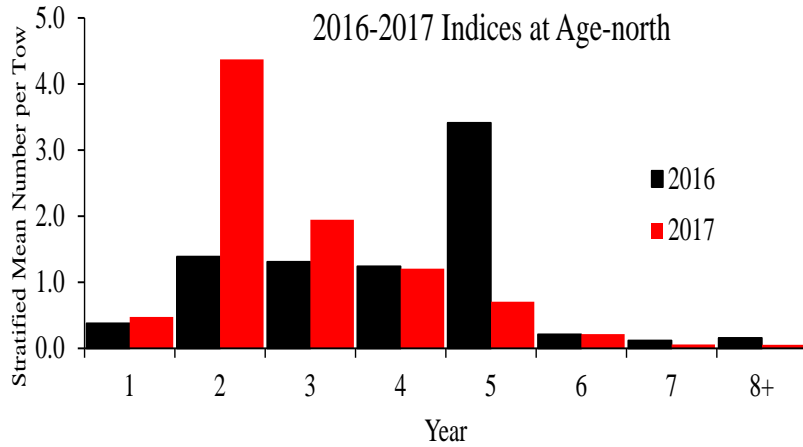
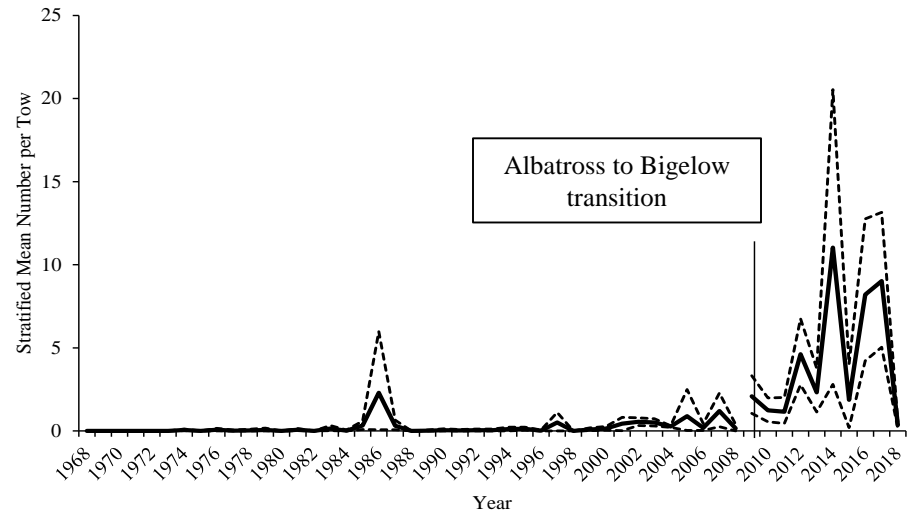
Year	OFL		ABC	
	mil lb	mt	mil lb	mt
2017	12.05	5,467	10.47	4,750
2018	10.29	4,669	8.94	4,057
2019	9.18	4,163	7.97	3,617

2019 Specifications

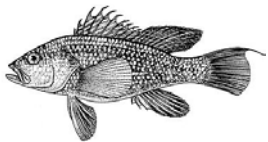
- In 2017, Council and ASMFC decided to postpone adoption of 2019 specifications
 - Signs of large 2015 year class
 - Potential for assessment update prior to 2019
- Operational assessment update currently planned for early 2019
- May revise 2019 specs mid-year

Survey Indices

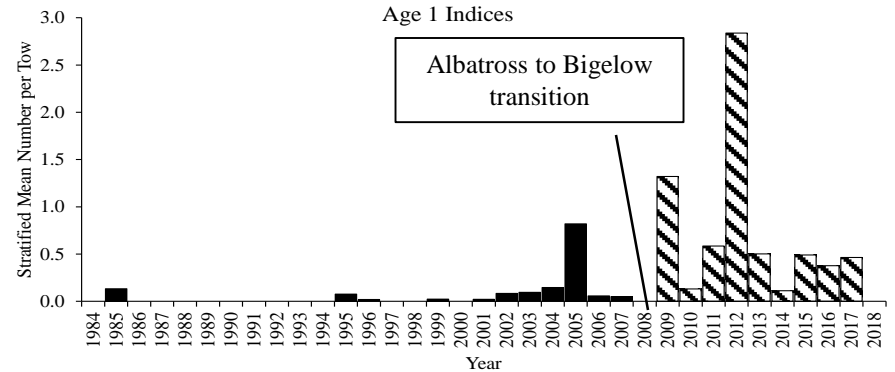
NEFSC spring north offshore stratified mean number per tow (\pm 90% CI) of Black Sea Bass, 1968-2018.



NEFSC Black Sea Bass spring indices at age from northern region.

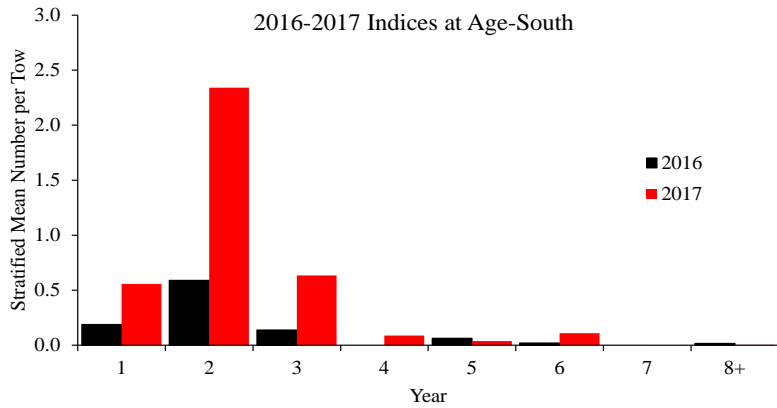
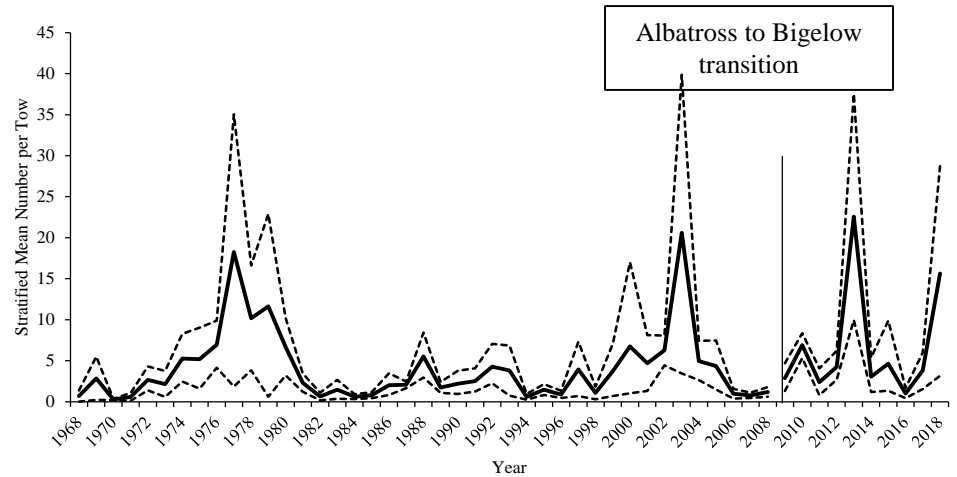


NEFSC spring indices at age 1 from northern region, 1984 – 2018.

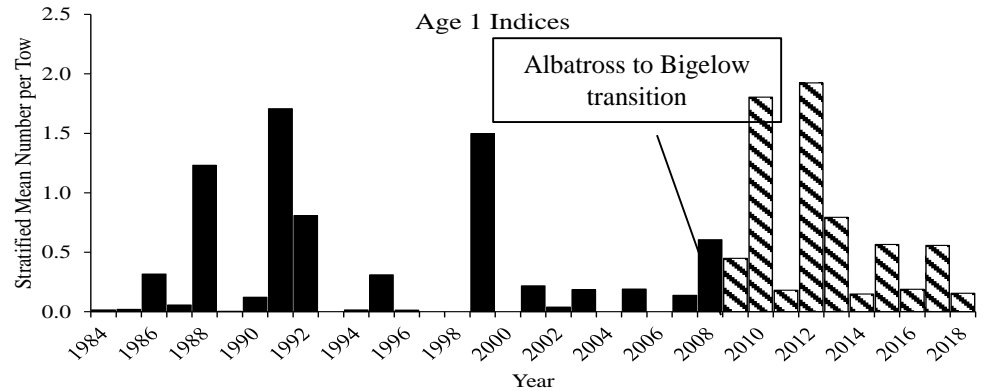


Survey Indices

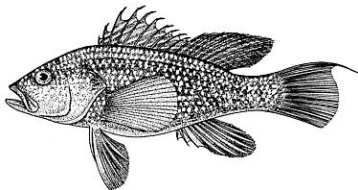
NEFSC spring south offshore stratified mean number per tow (\pm 90% CI) of Black Sea Bass, 1968-2018.



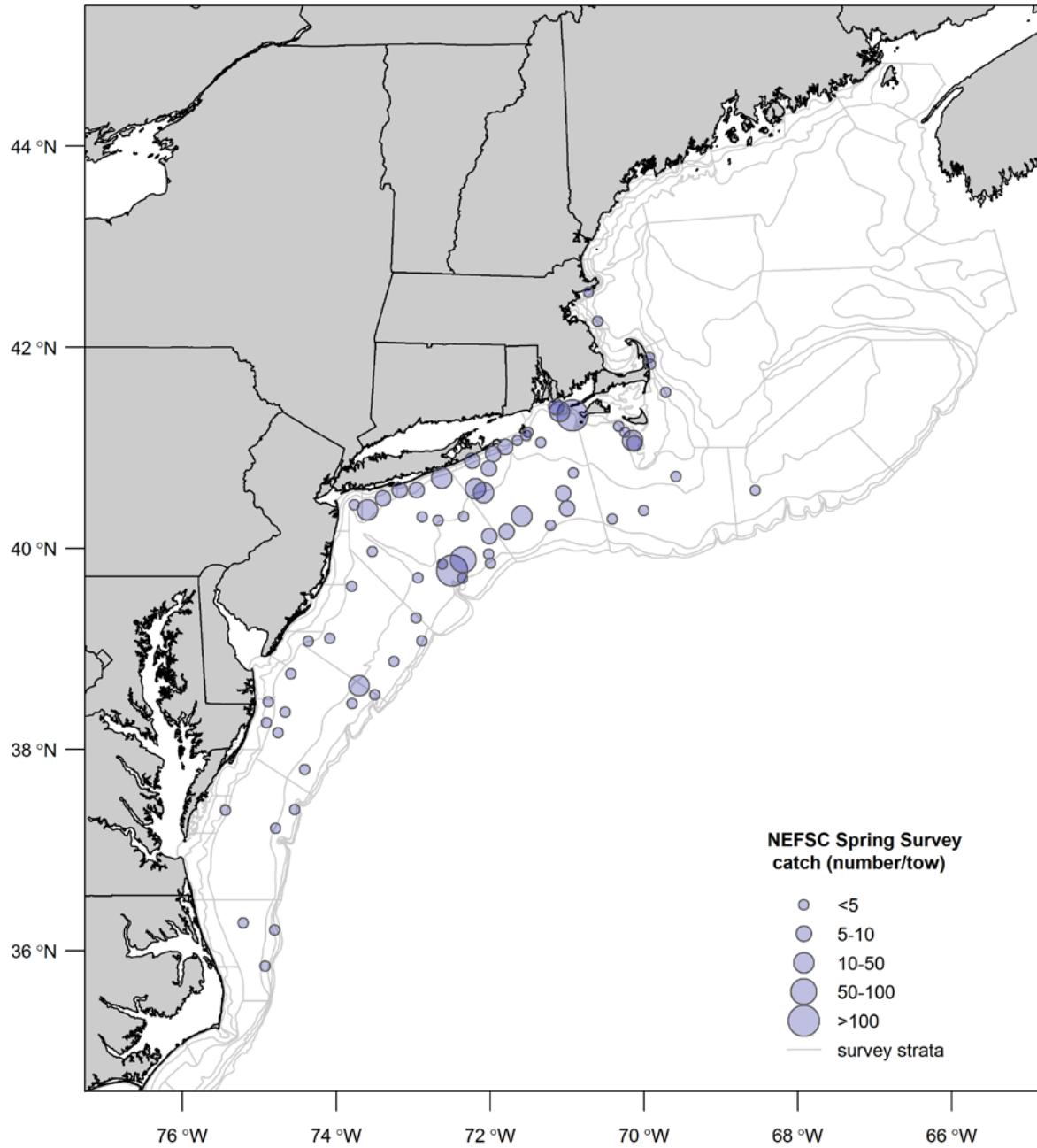
NEFSC spring indices at age 1 from southern region, 1984 – 2018.



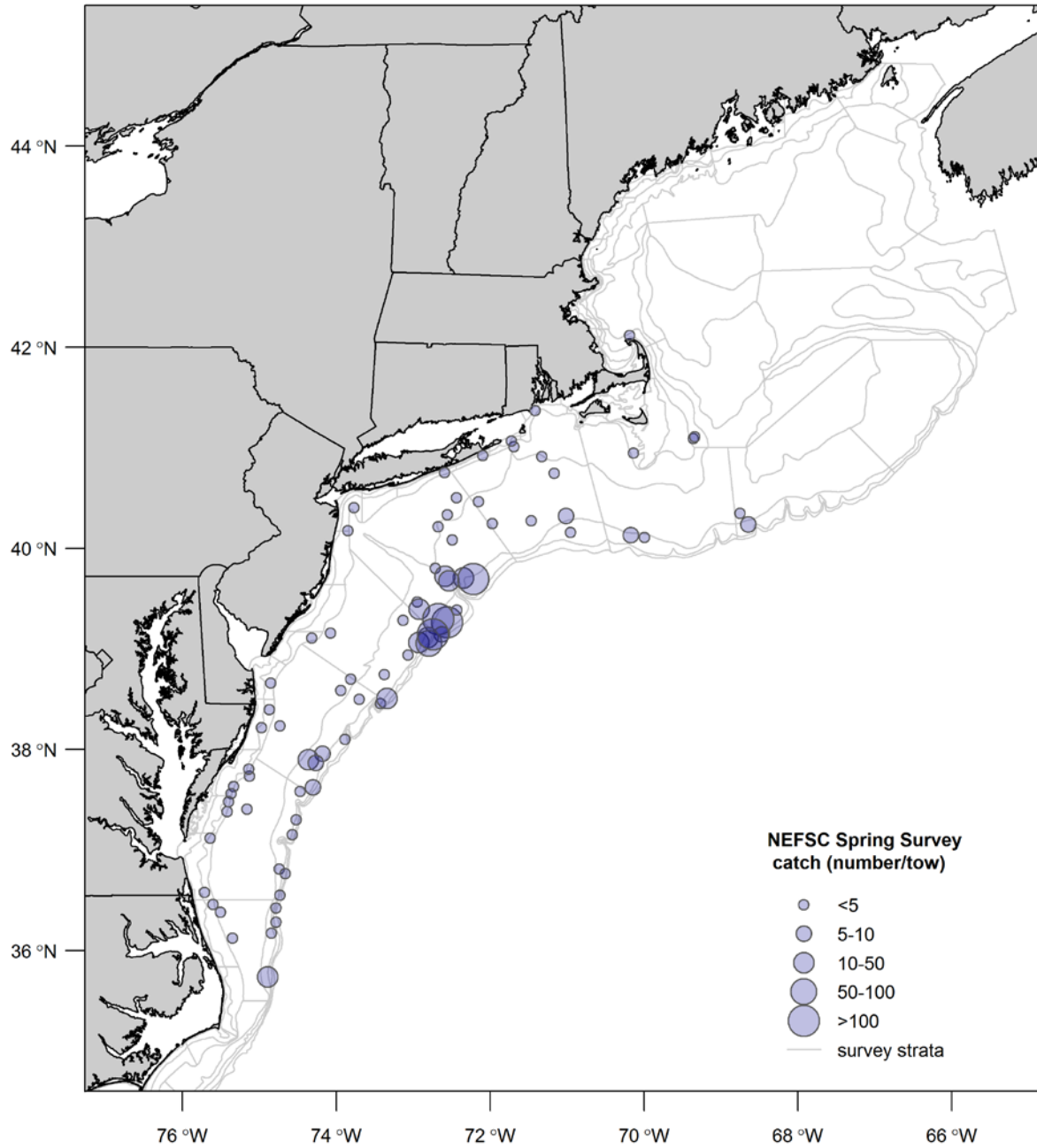
NEFSC Black Sea Bass spring indices at age from southern region.



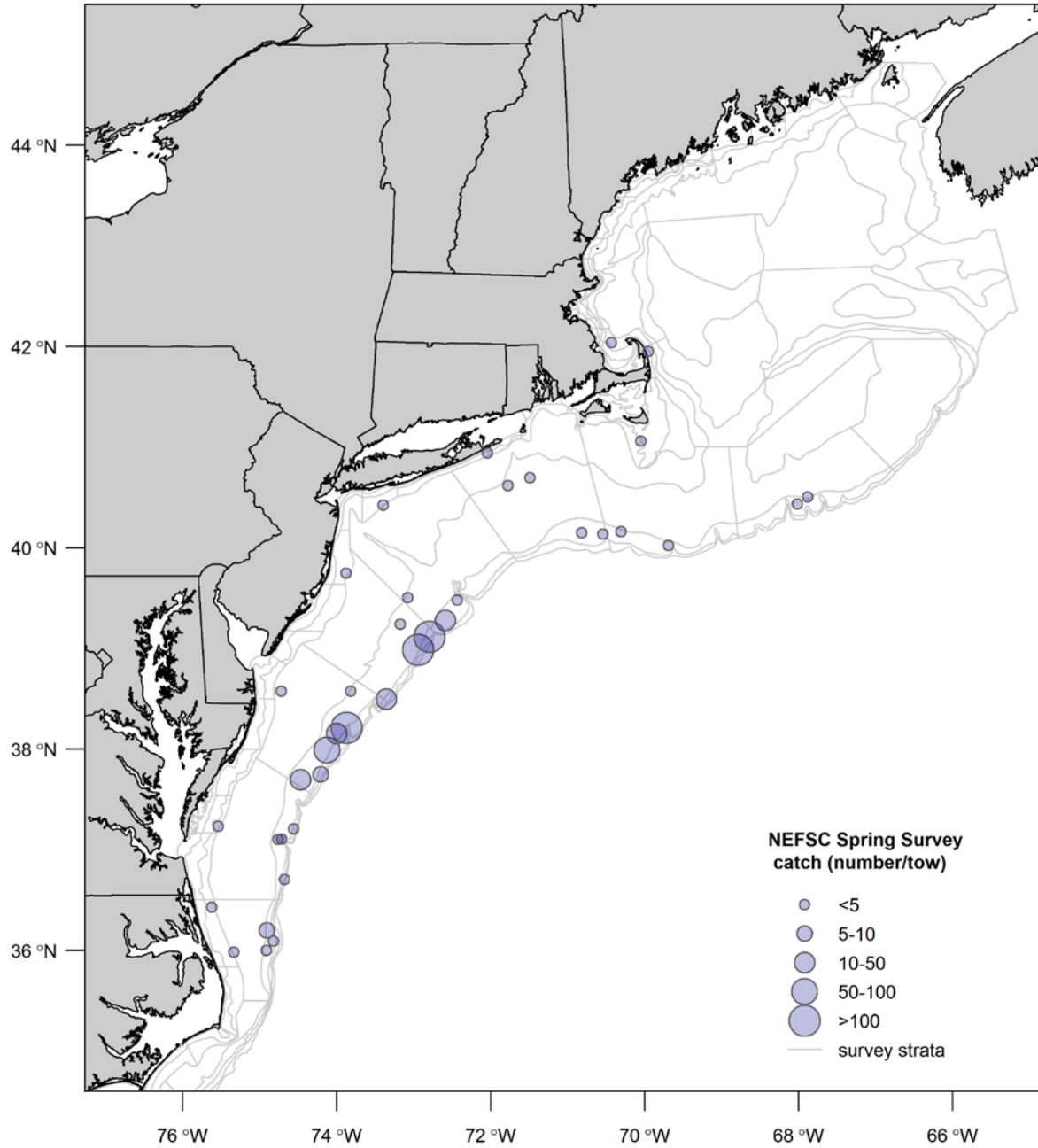
SPRING 2016



SPRING 2017



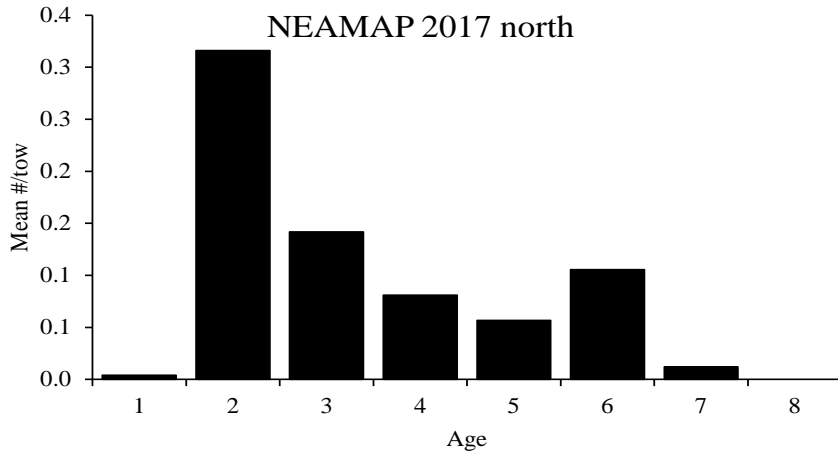
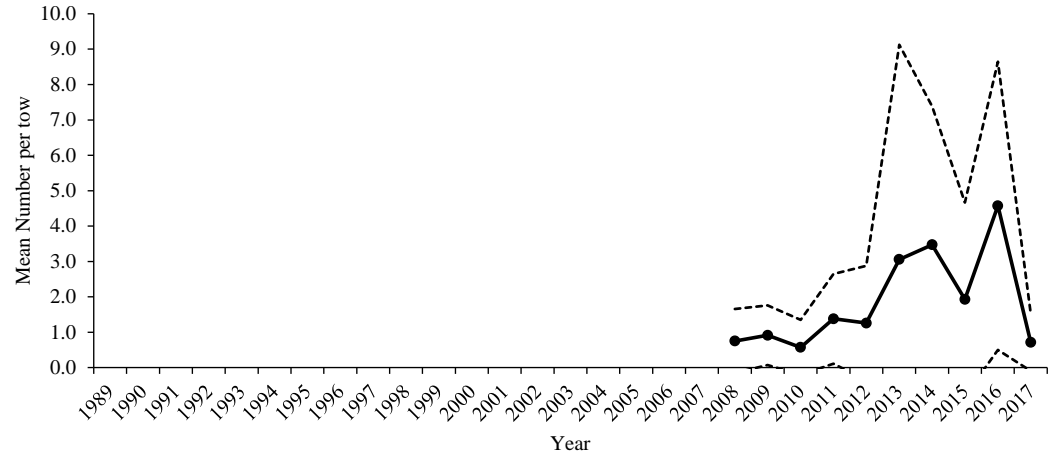
SPRING 2018



Survey Indices

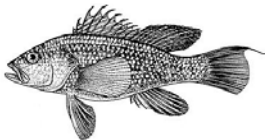
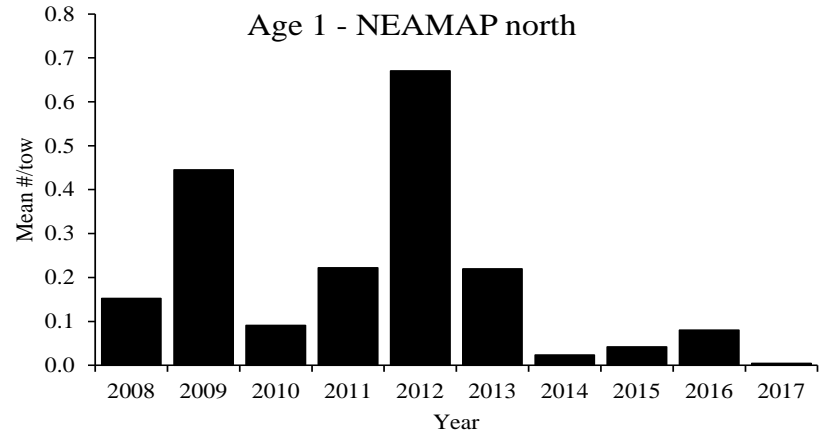
NEAMAP spring Northern stratified mean number per tow (\pm 90% CI) of Black Sea Bass, 2008-2017.

NEAMAP Spring North Black Sea Bass Trawl Survey Index



NEAMAP Black Sea Bass 2017 spring Northern stratified mean number per tow at age

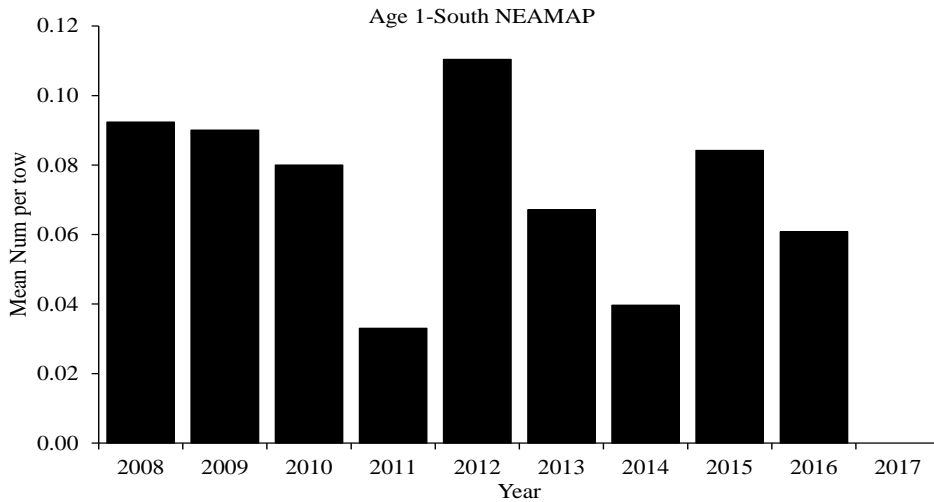
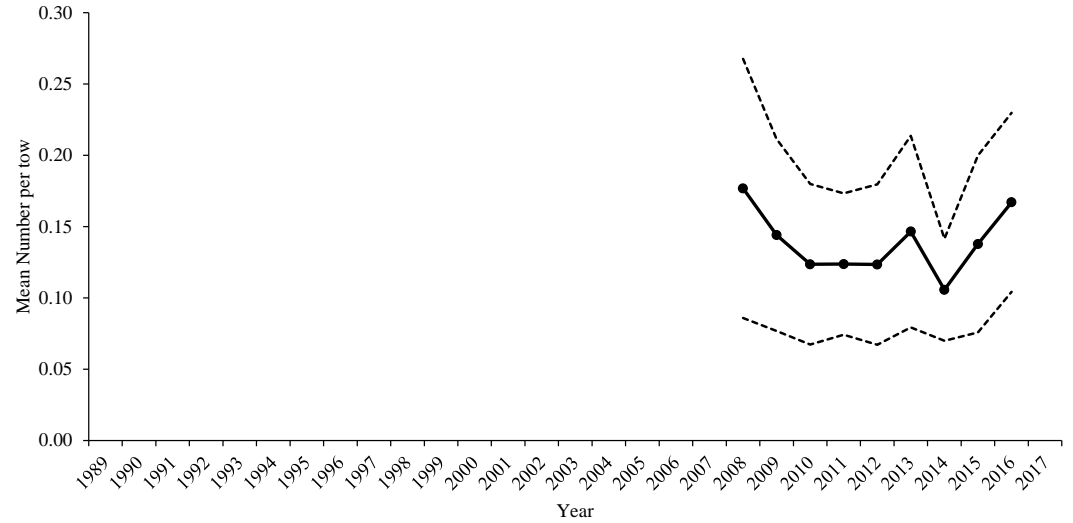
NEAMAP Black Sea Bass. 2017 spring Northern stratified mean number per tow at age 1



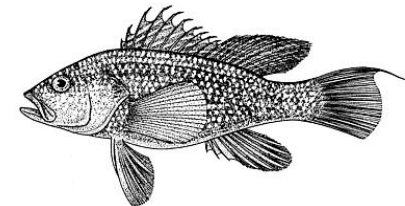
Survey Indices

NEAMAP spring Southern stratified mean number per tow (\pm 90% CI) of Black Sea Bass, 2008-2017.

NEAMAP Spring South Black Sea Bass Trawl Survey Index

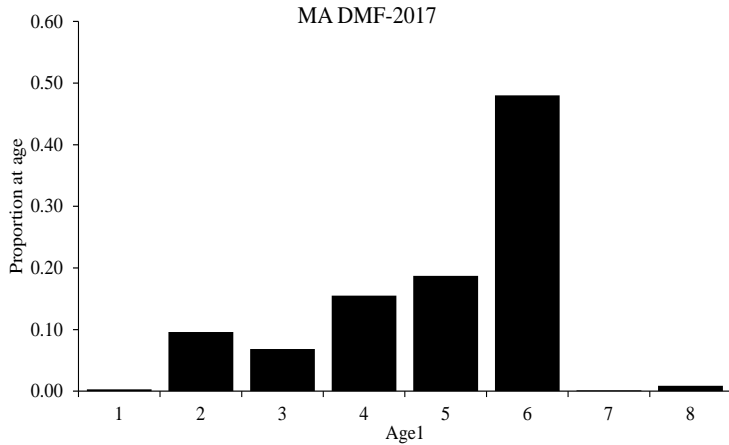
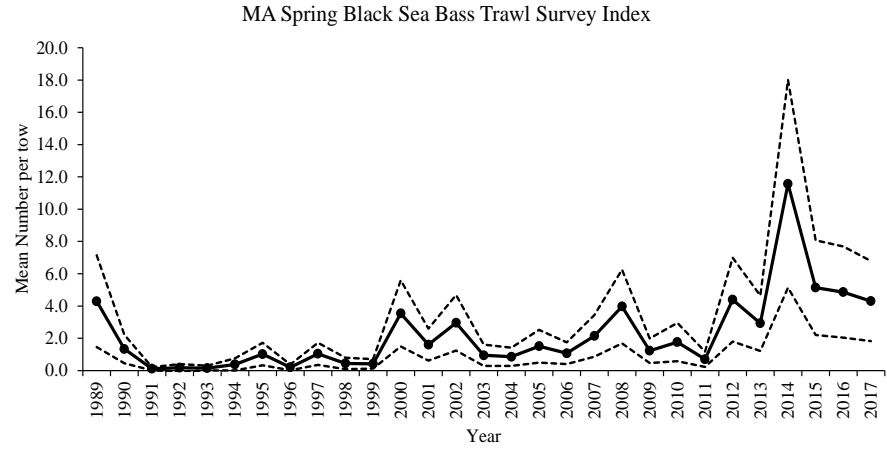


NEAMAP Black Sea Bass.
2017 spring Southern stratified mean number per tow at age 1

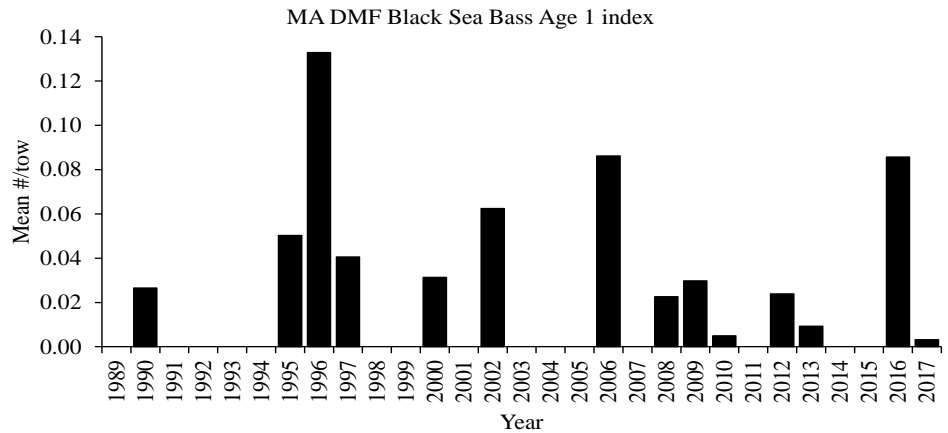


Survey Indices

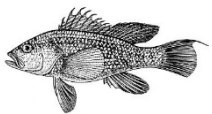
MA DMF Black Sea Bass
spring stratified mean number
per tow (\pm 90% CI), 1989-
2017.



MA DMF Black Sea Bass
2017 spring stratified mean
number per tow at age

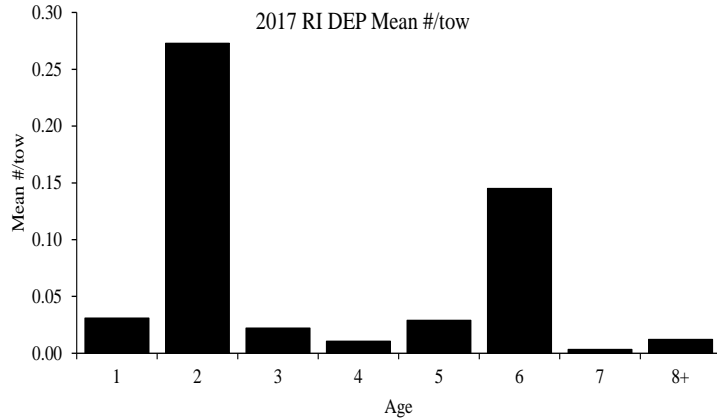
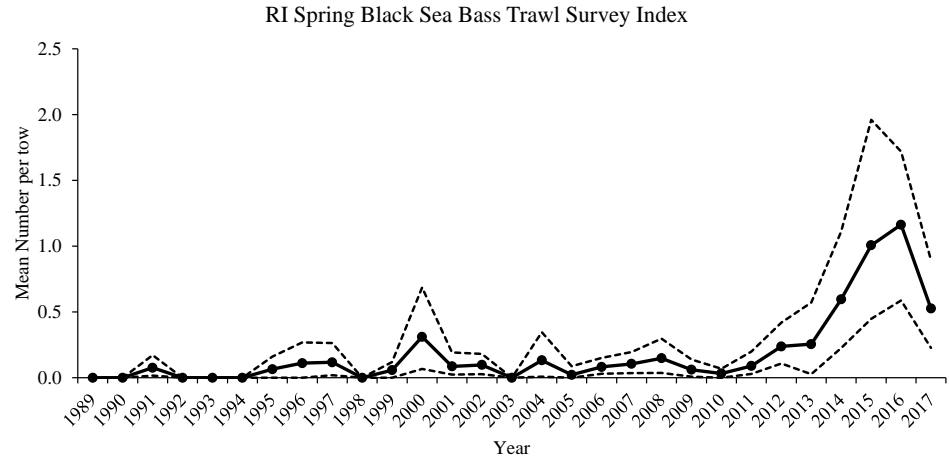


MA DMF Black Sea Bass.
2017 spring stratified mean
number per tow at age 1

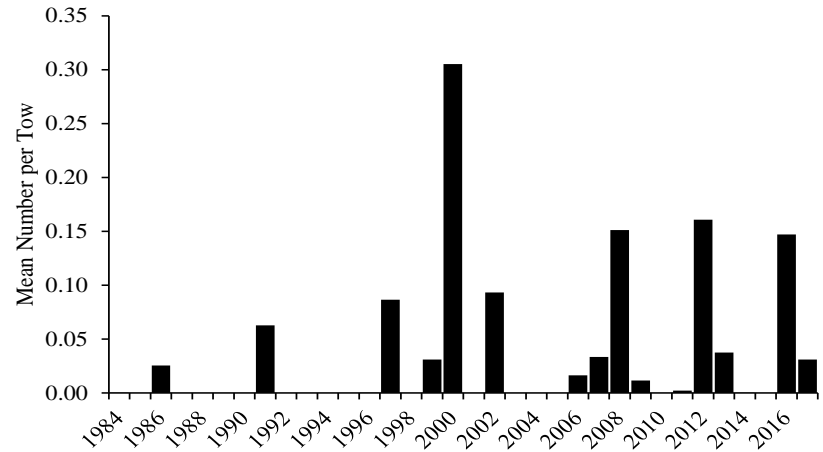


Survey Indices

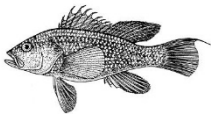
RI DEM Black Sea Bass
spring stratified mean number
per tow (\pm 90% CI), 1989-
2017.



RI DEM Black Sea Bass 2017
spring stratified mean number
per tow at age

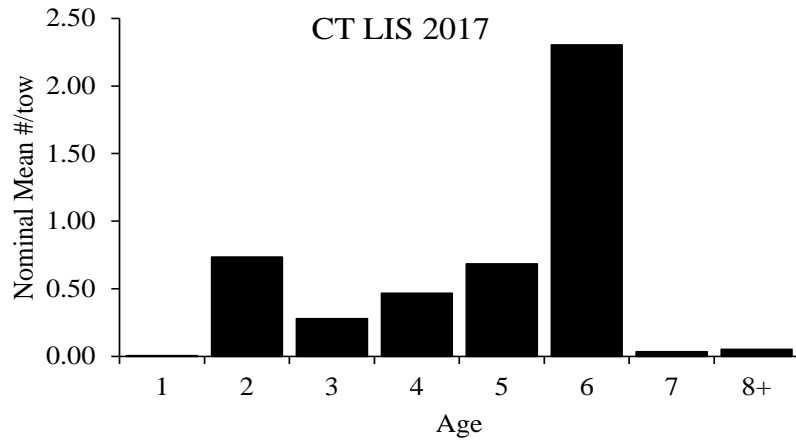
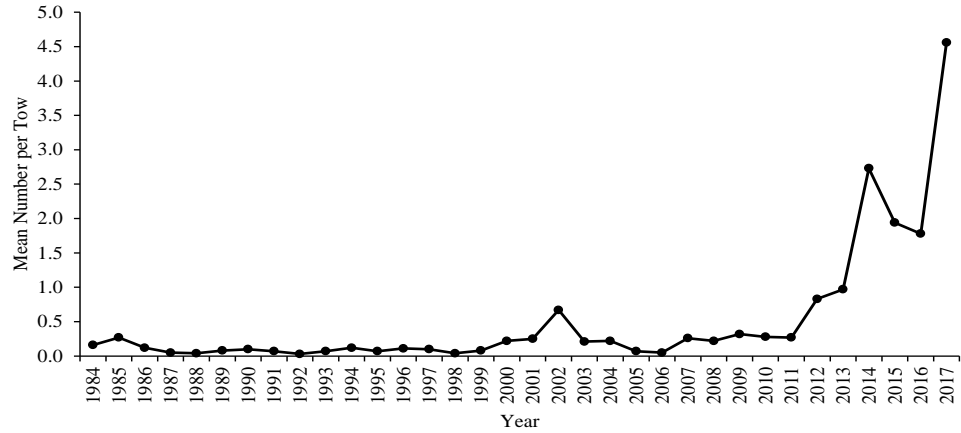


RI DEM Black Sea Bass.
2017 spring stratified mean
number per tow at age 1

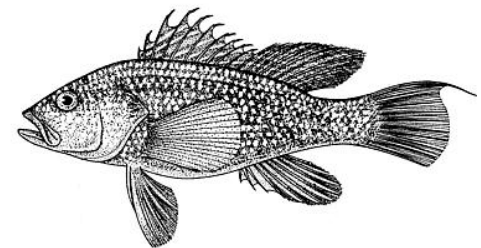


Survey Indices

CT DEP spring Black Sea Bass stratified mean number per tow (nominal index), 1984-2017.

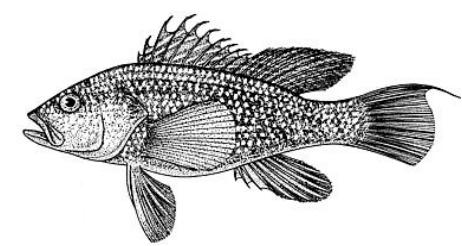
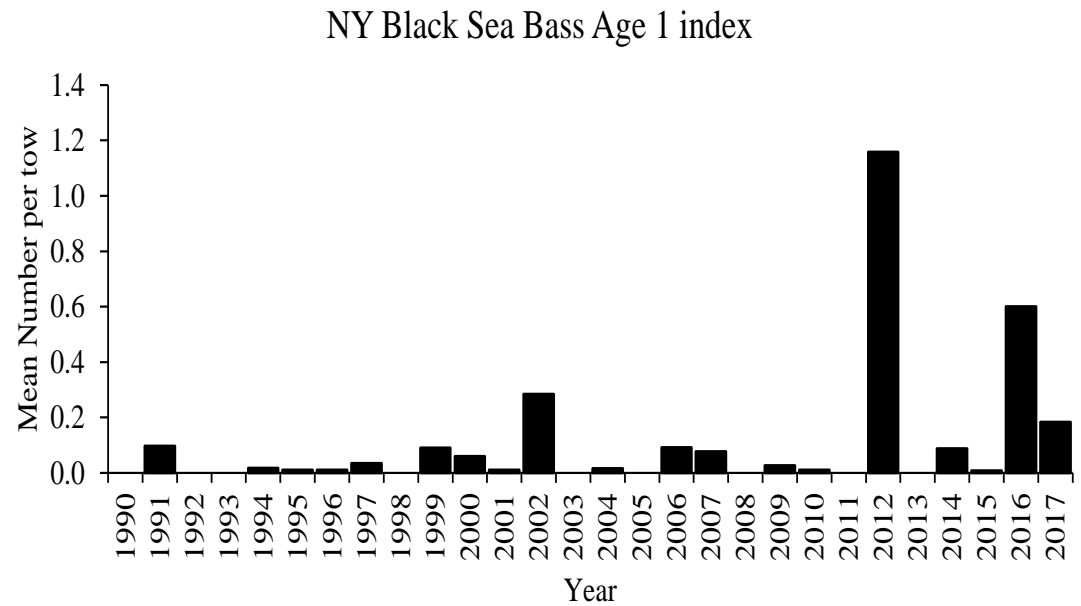


CT DEP Black Sea Bass 2017 spring stratified mean number per tow at age



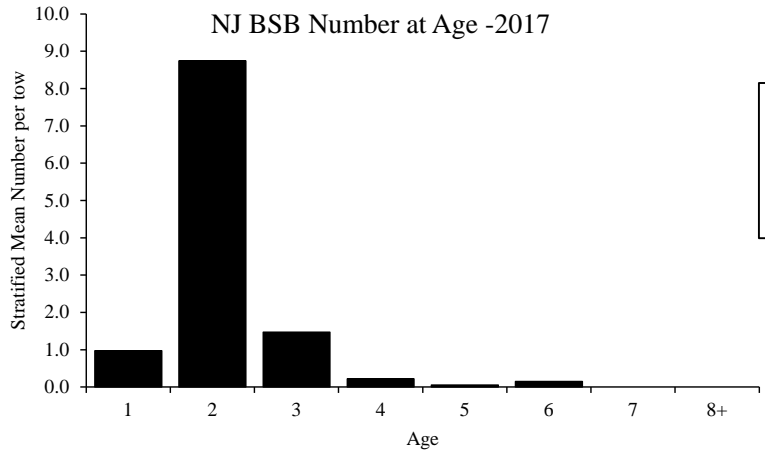
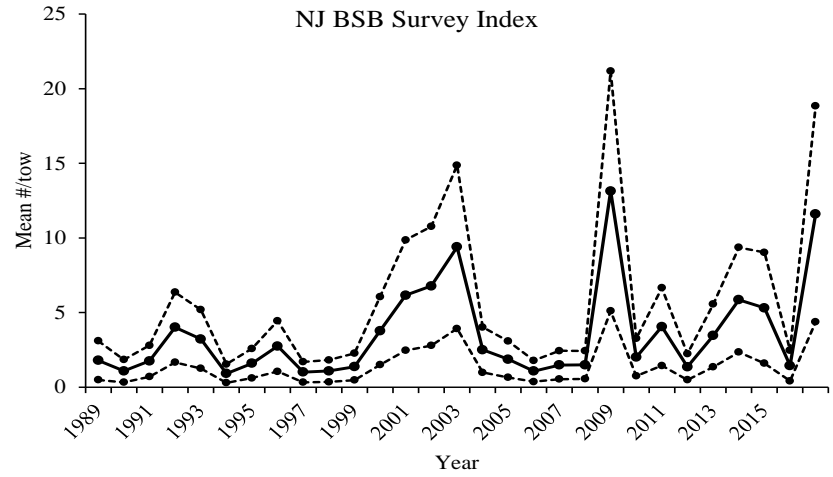
Survey Indices

NY DEC spring Black Sea Bass stratified mean number per tow at age 1, 1990-2017.



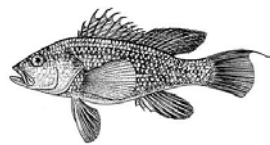
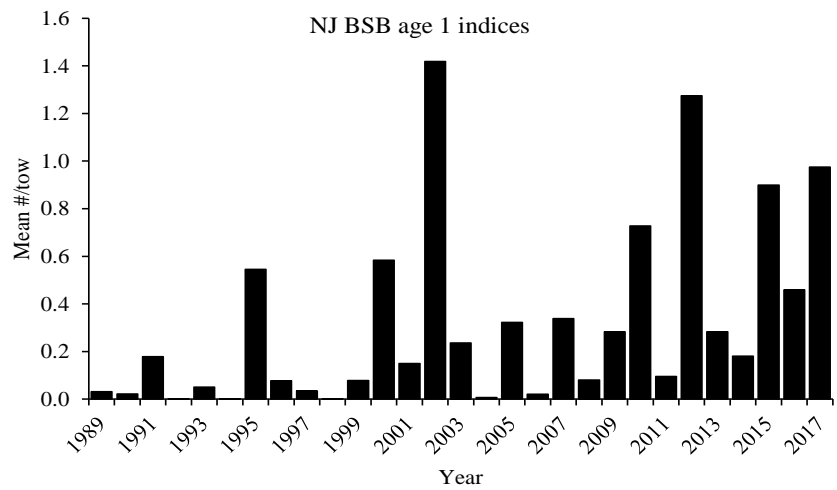
Survey Indices

NJ DEP Black Sea Bass
spring stratified mean number
per tow (\pm 90% CI), 1989-
2017.



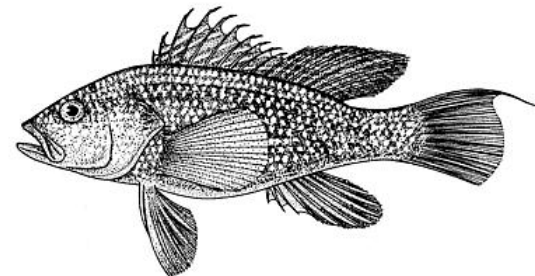
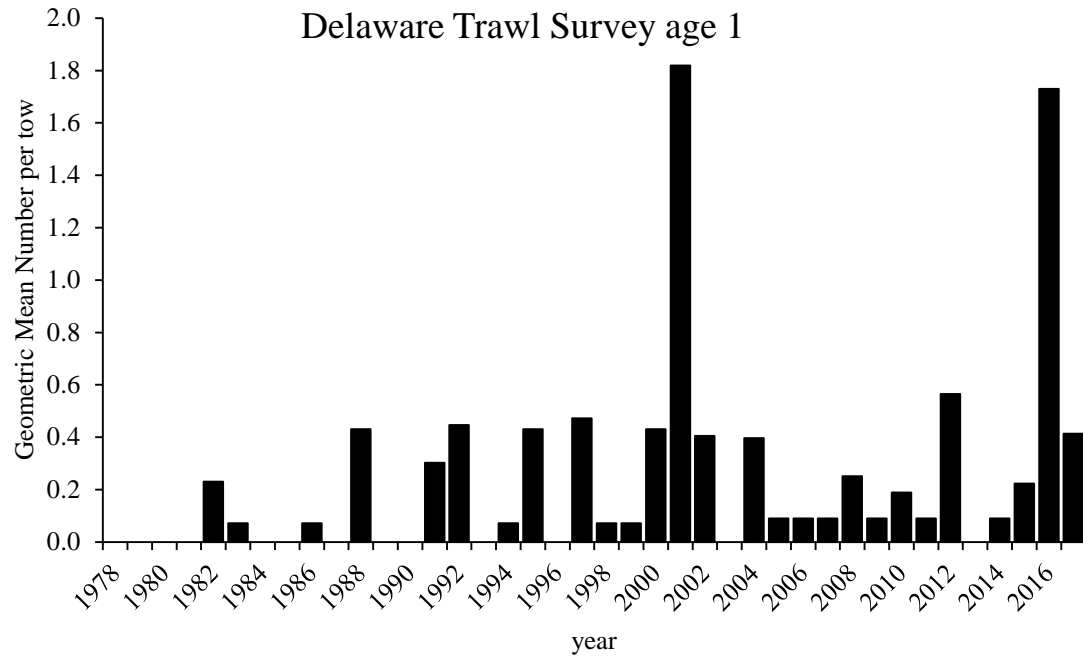
NJ DEP Black Sea Bass 2017
spring stratified mean number
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Survey Indices

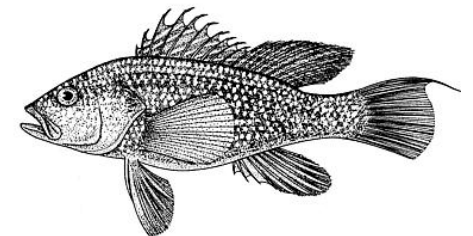
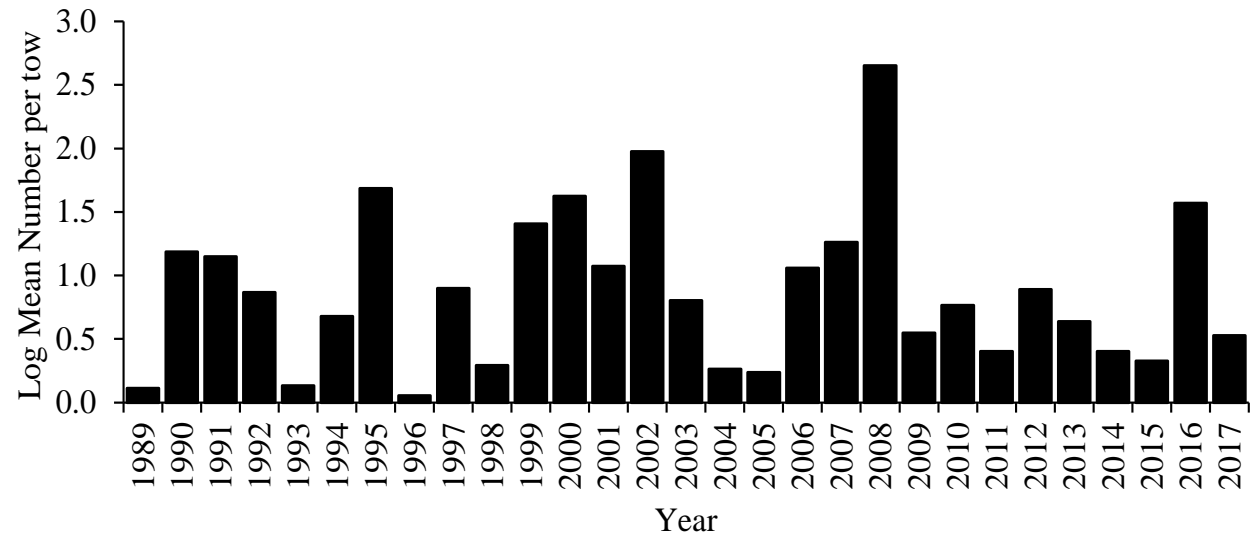
DE DFW Black Sea Bass
spring stratified mean number
per tow (\pm 90% CI), 1978 -
2017.



Survey Indices

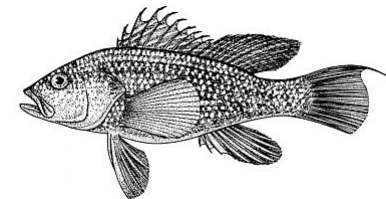
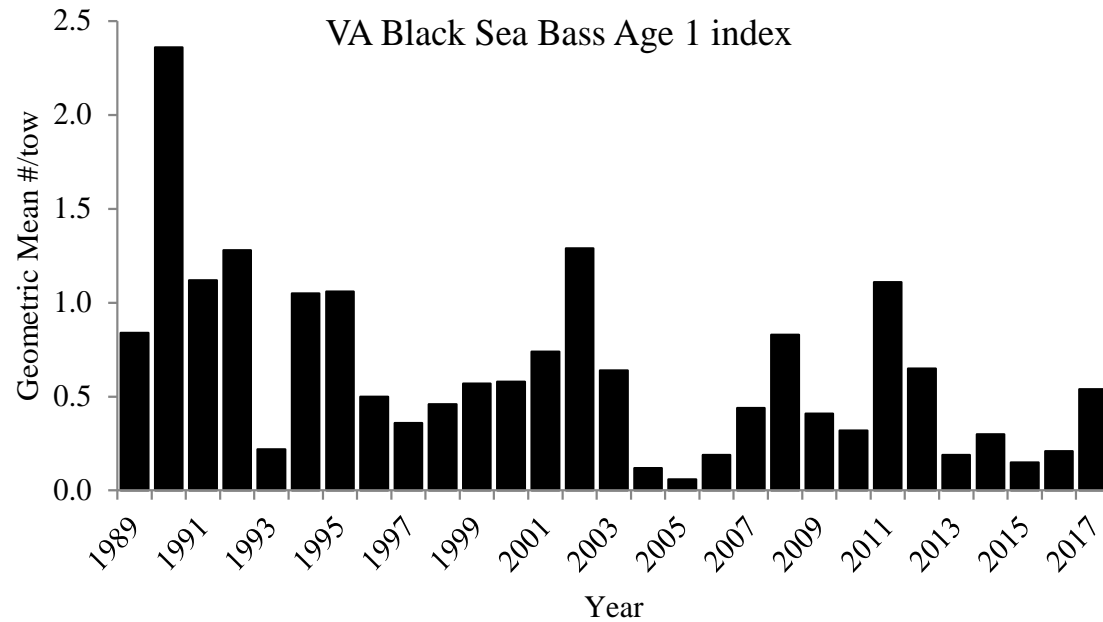
MD DNR Black Sea Bass
spring stratified mean number
per tow at age 1, 1989 -2017.

MD Black Sea Bass Age 1 index



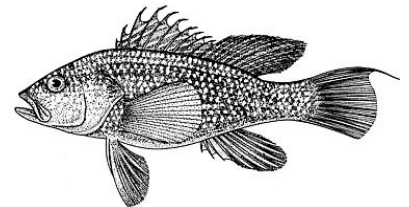
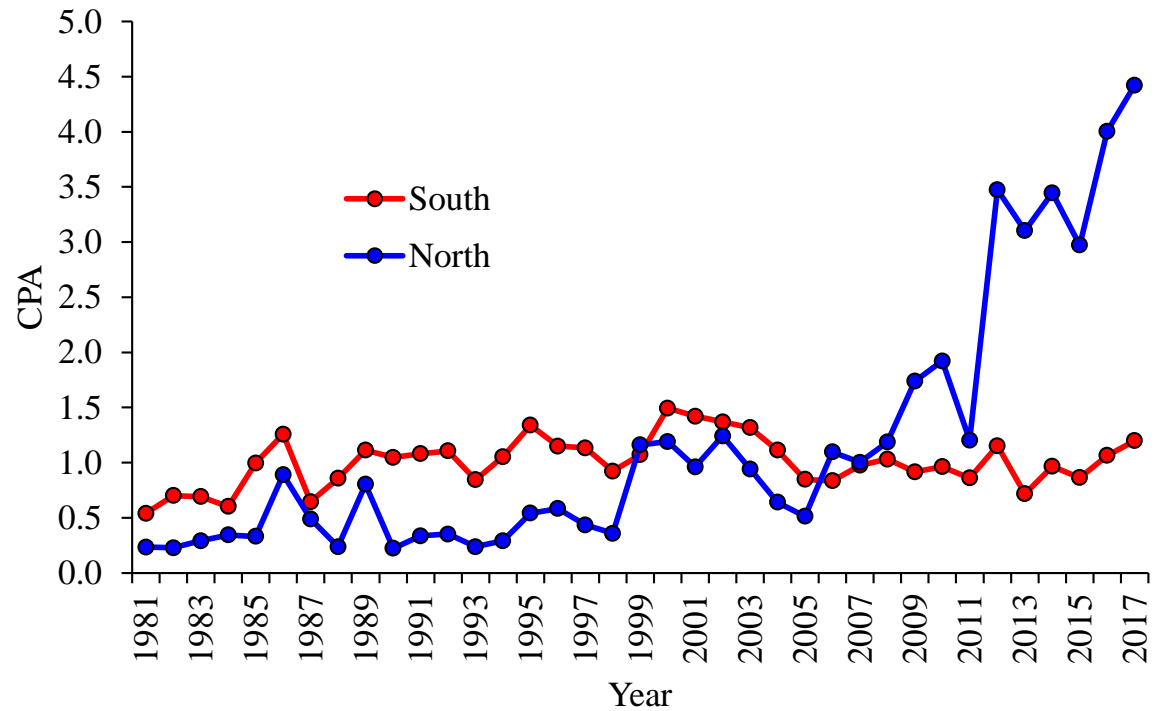
Survey Indices

VIMS Black Sea Bass spring stratified mean number per tow a age 1, 1989 -2017.



Fishery Dependent Indices

MRIP recreational catch (AB1B2) per angler for northern and southern regions, 1981-2017. Effort based on catch per angler trip within a regional guild of species.



Thanks to the following for providing information:

Tiffany Vidal Cunningham MA DMF

Jason MacNamee RI DEM

Greg Wojick CT DEP

John Maniscalco NY DEC

Jeff Brust – NJ DEP

Rich Wong – DE DEM

Steve Doctor MD DNR

Sydney Alhale - VMRC

Chris Bonzek VIMS

James Gartland VIMS

Joshua Dayton (age data)– NEFSC

Alicia Miller – NEFSC Survey maps

And of course all the fishermen
providing catch information

