

WENCHMAN GULF OF MEXICO



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March 2023 SSC meeting, Tampa, FL

WENCHMAN

- SSC RECOMMENDED THE COUNCIL REMOVE WENCHMAN FROM THE MID-WATER SNAPPER COMPLEX
- SSC RECOMMENDED THE COUNCIL REQUEST THE GSMFC WORK WITH FIVE GULF STATES TO COMPILE STATE TRAWL LANDINGS
- INFORMATION COMPILED FOR REVIEW
 - ABUNDANCE AND LENGTH COMPOSITION FROM SURVEYS
 - AGE COMPOSITION
 - REVIEW FISHERY INDEPENDENT AND COMMERCIAL HARVEST TO REFINE REFERENCE YEARS FOR OFL

SEAMAP SQUID / BUTTERFISH SURVEY 1986

SUBCOMMITTEE REPORT TO GSMFC TCC 1986

In the north central Gulf, the 8,725-square-nautical-mile area sampled (Pensacola to the Atchafalaya), butterfish biomass was estimated at 27,188 metric tons, with a mean catch of 120.0 lb/hr.

For the western Gulf (western Louisiana to Brownsville), a sampled area of 13,147 square nautical miles, butterfish biomass was estimated at 64,860 metric tons, with a mean catch of 193.4 lb/hr.

A total of five New England trawlers operated in the Gulf during May and June. Three converted shrimp trawlers were also fishing for butterfish this year. These vessels worked in the same general areas surveyed by the squid/butterfish cruises. Approximately 2 million pounds of butterfish were landed, with a maximum of 70,000 lb/tow; however catches were erratic.

SEAMAP SQUID AND BUTTERFISH COMPARISON TOWS 1987

SUBCOMMITTEE REPORT TO GSMFC TCC 1987

Off AL/MS		CHAPMAN				TOMMY MUNRO		
Species		Mean	SD	% catch		Mean	SD	% catch
Butterfish		17	37	5.23%		13	26	6.12%
Rough scad		57	146	17.65%		23	43	10.77%
Wenchman		19	24	5.85%		14	24	6.82%
Longspine porgy		23	41	7.01%		23	63	11.06%
Atlantic croaker		20	48	6.21%		14	39	6.87%
Broad flounder		7.5	9	2.34%		7.5	15	3.61%
Round Herring		0.3	1	0.10%		0.1	0.2	0.03%
Longspine scorpionfish		3.9	6.6	1.20%		0	0.1	0.01%
Chub mackerel		25	93	7.90%		13	30	6.04%
Spot		6	16	1.85%		2.6	6.8	1.24%
Snipefish		14	50	4.35%		6	24	2.85%
Silver Rag		21	62	6.49%		8.8	34	4.21%
Arrow squid		1	3.3	0.30%		0.6	1.7	0.28%
Longfin squid		2.2	4.5	0.68%		2.3	7.2	1.09%
	N				N			
Total catch	27	322			26	209		

SEAMAP FALL DEEPWATER TRAWLS 2002-2004, 2006-2008

GRACE ET AL. 2010

Gulf wide			
Species		Total kg	% Catch
Gulf Butterfish		9,499	12.67%
Rough Scad		16,138	21.52%
Wenchman		4,329	5.77%
Longspine Porgy		7,606	10.14%
Round Herring		3,746	5.00%
Atlantic Angel Shark		2,297	3.06%
Shortjaw Lizardfish		2,168	2.89%
Pinfish		2,162	2.88%
Atlantic Cutlassfish		2,016	2.69%
Atlantic Croaker		1,940	2.59%
	N		
50-500 m	797	74,987	

MSLABS SMALL PELAGICS SURVEY 2002-2014

POLLACK ET AL. 2016

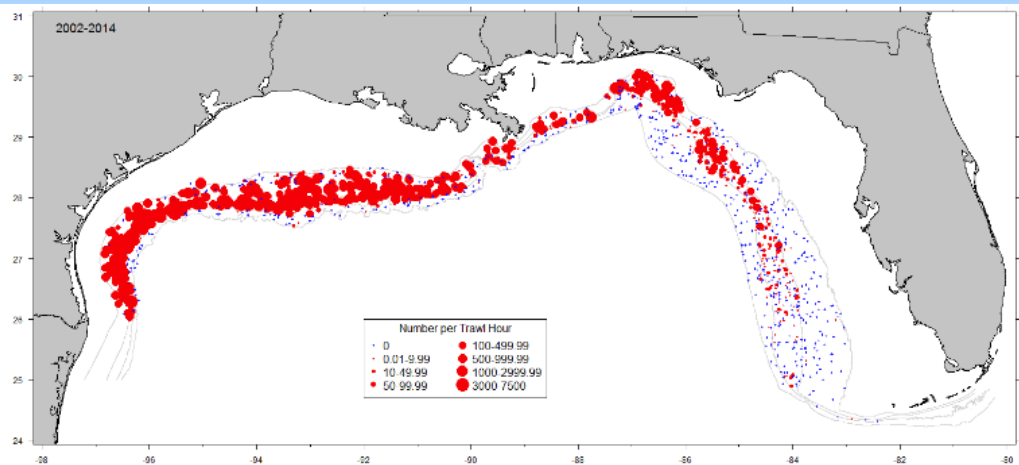
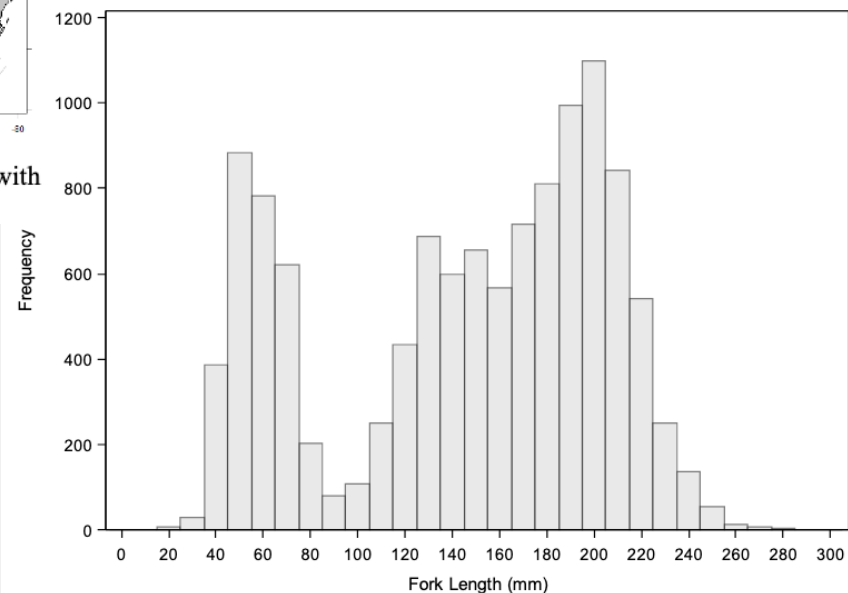


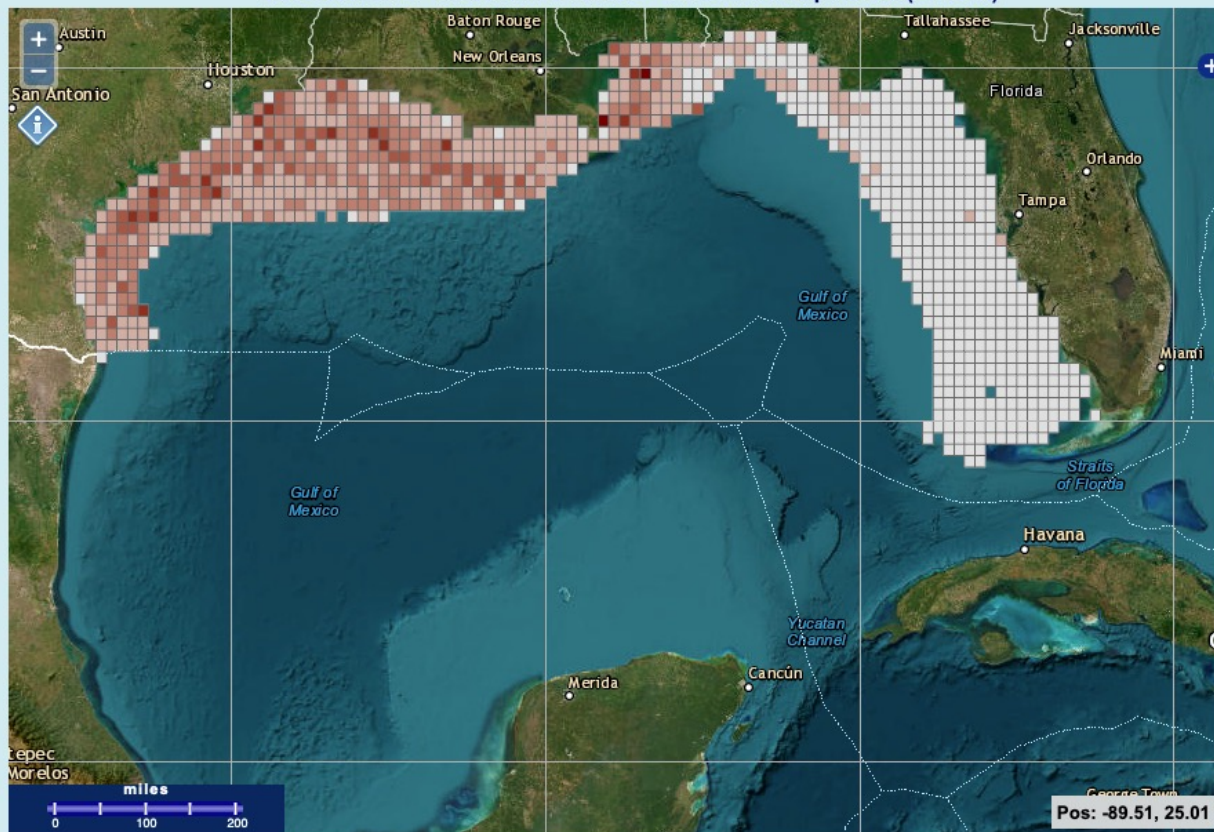
Figure 1. Stations sampled from 2002 to 2014 during the MSLABS Small Pelagics Survey with the CPUE for Wenckman. Contour lines are 50, 110, 200 and 500 m, respectively.





Basemap ▾ Physical ▾ Biotic ▾ Living Marine Resources ▾ Socioeconomic Conditions ▾ Environmental Quality ▾ Jurisdictions ▾

Gulf Butterfish - Relative Abundance - Fisheries-Independent (Federal)

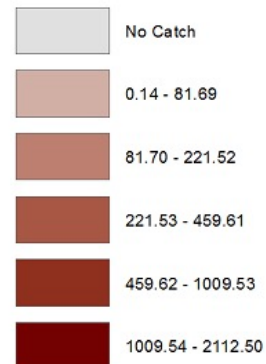


▼ Description

▼ Legend

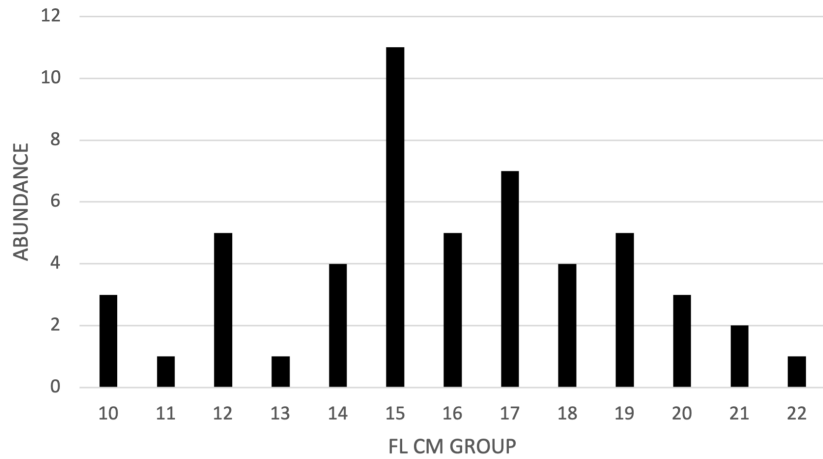
Gulf Butterfish *Peprilus burti*

Catch
(number / hour)

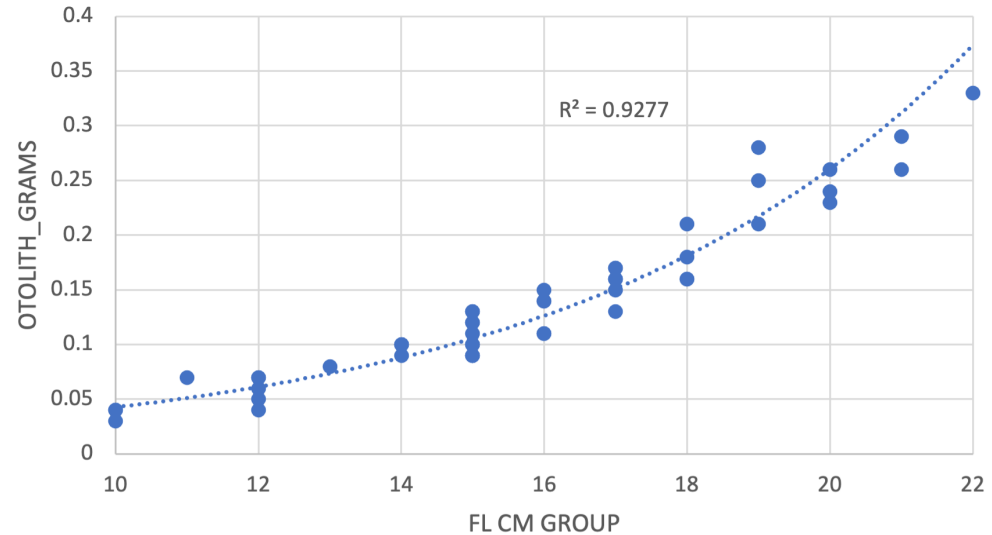


▼ More Information

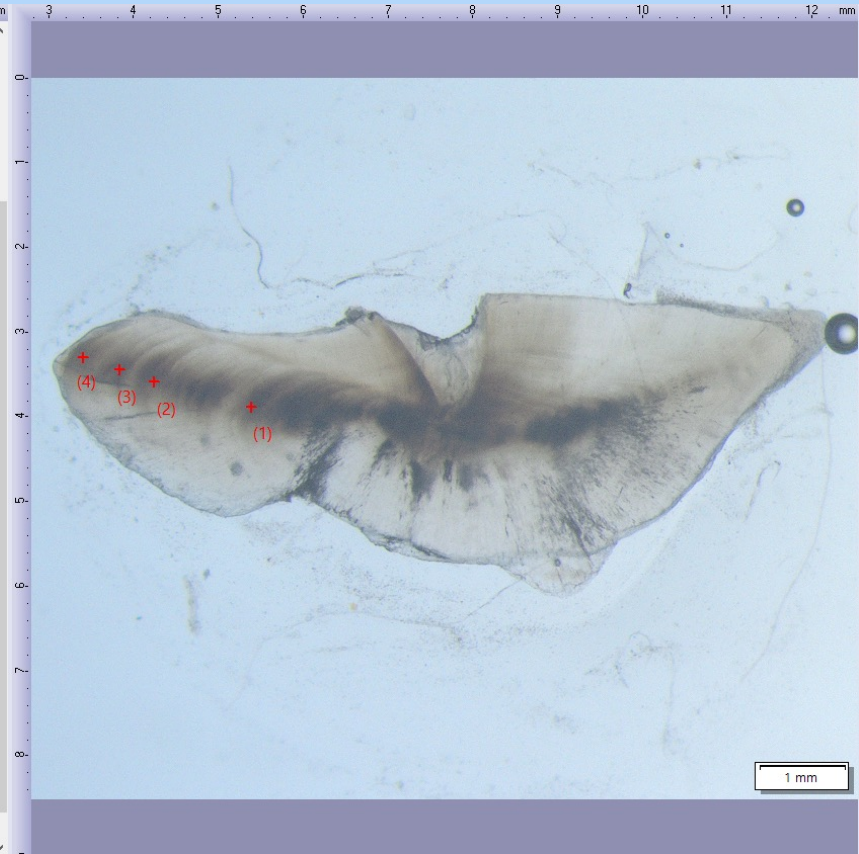
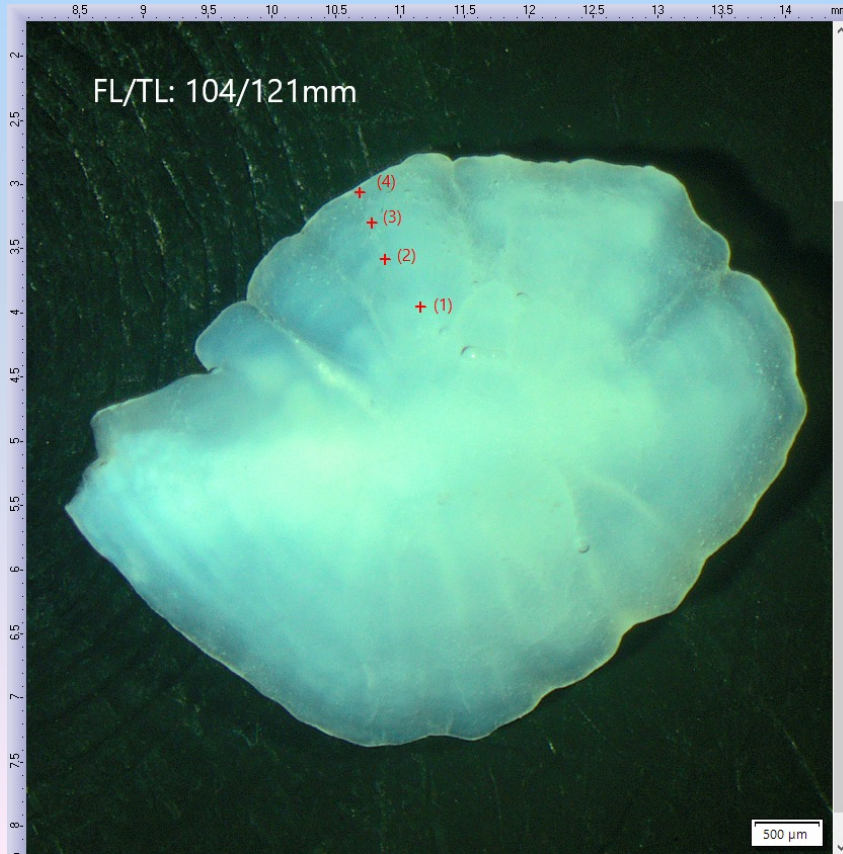
FISHERY DEPENDENT 2022



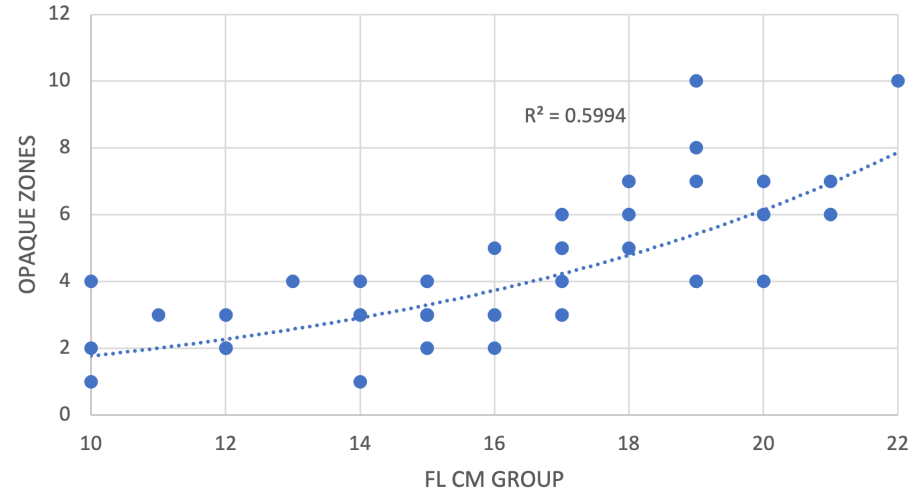
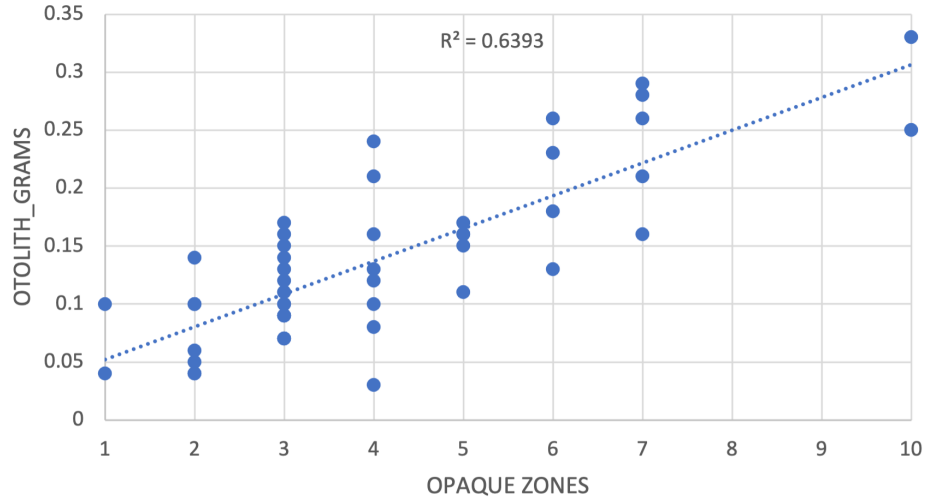
Samples (N=52) from deep water trawls landed in Alabama.



OTOLITH OPAQUE ZONES - WENCHMAN



FISHERY DEPENDENT 2022



Anderson et al. 2008

- LARGEST REPORTED COUNT OF OPAQUE ZONES WAS 14
- SAMPLES PREDOMINANTLY FROM WEST FLORIDA SHELF, FISHERY INDEPENDENT
- 199 – 237 MM FL
- POOR RELATIONSHIP OF OPAQUE ZONES TO OTOLITH WEIGHT

Alabama samples 2022

- LARGEST REPORTED COUNT OF OPAQUE ZONES WAS 10
- SAMPLES FROM NORTH CENTRAL GULF, FISHERY DEPENDENT
- 104 – 222 MM FL
- POOR RELATIONSHIP OF OPAQUE ZONES TO OTOLITH WEIGHT AND FORK LENGTH
- POTENTIAL PHYSICAL OR ENVIRONMENTAL DRIVERS FOR OPAQUE ZONES

GULF OF MEXICO TRAWL LANDINGS REPORTED TO STATES 1993-2022

- WENCHMAN REPORTED (ALL GEARS) FROM ZONES 1-18
- TRAWL GEAR FISHED PRIMARILY IN ZONES 8-14
- HOOKED GEARS PRIMARILY FROM ZONES 2-5, 15-17
- 82% OF HARVEST IS REPORTED AS TRAWL, INCREASES TO 98% IF UNCODED GEAR IS ADDED TO TRAWL
- MOST YEARS ARE CONFIDENTIAL
- ACL/AM AND TRIP TICKETS IN EFFECT FOR ALL GULF STATES 2012.

GULF OF MEXICO TRAWL LANDINGS

WENCHMAN	AVERAGE POUNDS	STD DEV
1993-2011	9,669	±7, 242
2012-2022	39,900	± 46,308
2013-2022*	40,717	± 48,729
BUTTERFISHES		
1993-2011	370,735	±284,783
2012-2022	395,476	±256,443
2013-2022	330,319	±145,543
SCAD		
1998-2011	77,777	±71,075
2012-2022	195,359	±111,027
2013-2022	197,424	±116,810

* 10-YEAR AVERAGE

GULF OF MEXICO TRAWL LANDINGS

WENCHMAN	AVERAGE POUNDS	STD DEV
2016-2020	33,286	± 34,858
2017-2021	60,884	± 65,621
2018-2022*	63,118	± 63,669
BUTTERFISHES		
2016-2020	317,590	± 204,739
2017-2021	293,994	± 173,012
2018-2022	278,300	± 169,514
SCAD		
2016-2020	120,375	± 113,563
2017-2021	119,169	± 111,344
2018-2022	152,740	± 130,887

* 5-YEAR AVERAGE

SUMMARY

- WENCHMAN ARE A SMALLER PROPORTION OF FISHERY INDEPENDENT AND COMMERCIAL CATCHES COMPARED WITH GULF BUTTERFISH AND SCAD
- MAJORITY OF THE POPULATION IN THE WESTERN GULF (ZONES 13-21)
- TRAWL GEAR FISHED PRIMARILY IN ZONES 8-14
- FISH LESS THAN 10" FL SUSCEPTABLE TO CAPTURE BY TRAWL
- AGE STRUCTURE IS UNDETERMINED