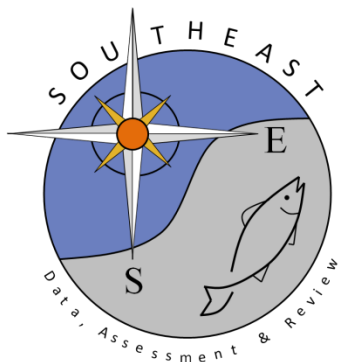


General Recreational Survey Data for Gray Triggerfish in the Gulf of America

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SEDAR100-DW-02

15 August 2025



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SEDAR 100-DW-02

General Recreational Survey Data for Gray Triggerfish in the Gulf of America

NOAA Fisheries
Southeast Fisheries Science Center
Sustainable Fisheries Division
Data Analysis and Assessment Support Branch

Samantha M. Binion-Rock

August 15, 2025

General recreational catch estimates for Gray Triggerfish are compiled from the following separate sampling programs:

1. Marine Recreational Information Program (MRIP) (SEDAR68-DW-13)
2. Texas Parks and Wildlife Department (TPWD) Creel survey (SEDAR70-WP-03)
3. Louisiana Creel survey program (LA Creel; 2014+) (SEDAR98-DW-18)

As part of the SEDAR stock assessment process, the data/estimates provided in this working paper may be updated based on discussions and recommendations of the Recreational Working Group. Please refer to the recreational section of the Data Workshop report for details on the estimates ultimately used in this assessment.

Parameters for data prepared for SEDAR 100 recreational catch data:

- Species: Gray Triggerfish
 - Catch estimates provided in this report include a percentage of unidentified Triggerfish (i.e., Triggerfish Family). For SEDAR 100, **100%** of unidentified Triggerfish landings and discards were assumed to be Gray Triggerfish. This is consistent with SEDAR 62. For all Triggerfish species (e.g. Gray, Ocean, and Queen) Gray Triggerfish account for almost 100% of all landings and discards except or a few years in the 1980s.
- Year Range: 1981 - 2024
- Geographic Range: Gulf of America states from Texas to western Florida, excluding the Florida Keys. Spatial summaries for SEDAR 100 have been separated into distinct domains: 'West' (Texas to Louisiana) and 'East' (Mississippi to western Florida). As

requested by the lead analyst, CVs are provided for East and West stock regions as well as for the entire Gulf of America.

- Fishing Modes: Charter, Private, Headboat (1981-1985)
 - As done in SEDAR 43, shore mode was excluded from landings. Gray Triggerfish typically inhabit waters between 80 – 300 ft and the shore mode comprised < 1 of the overall recreational landings.
- Weight Units: whole weight
- MRIP Calibration: Fully calibrated estimates that take into account the change in the Fishing Effort Survey (FES), the redesigned Access Point Angler Intercept Survey (APAIS), and the For Hire Survey (FHS). These calibrations allow for estimates in the entire time series to be compared to one another.
- TPWD Calibration: Applied ratio estimator developed from MRIP-FES study conducted in Texas in 2016 (SEDAR 74-RD-110) to calibrate TPWD catch and effort estimates for the private mode into MRIP-FES units (SEDAR 74-DW-10).
- LA Creel Calibration: Applied wave-specific ratio estimators developed from benchmarking of MRIP and LA Creel in Louisiana in 2015 - 2017 to calibrate LA Creel catch and effort estimates for the private mode into MRIP-FES units. Charter estimates between these two surveys are assumed equivalent and were not adjusted (West and Zhang 2020).
- MRIP Data Gaps from COVID: Missing 2020 intercepts were imputed from all APAIS data collected in 2018 and 2019 from the same strata as the 2020 data gap, with original sample weights reduced by a factor of two to account for using two years of data (Cody 2021). OST reevaluated this approach when more years of data became available (i.e. 2021+), but found it did not substantially change the imputed estimates and estimates did not need to be updated.
- SEFSC Data QAQC: Size records above an allowable (max size) threshold are excluded from average weight estimation and the summary tables included in this working paper (Tables 7-10). For SEDAR 100 Gray Triggerfish, this includes any weights heavier than 14.2065 pounds.

Summary of Data Imputations

Estimate	Strata	Imputed	Rationale
Catch	1981 Wave1 (TX-FLW)	Yes	Wave1 catch in 1982-1984 was not negligible
Catch	1981 - 1983 (Texas)	Yes	Texas catch in 1983-1985 was not negligible

Estimate	Strata	Imputed	Rationale
Discards	1981+ (Texas)	Yes	Discards in LA are low compared to other Gulf states, however they are not 0 for most years. The decision to impute is consistent with SEDAR 62.
Discards	2014 - 2015 (Louisiana)	No	Discards in LA contributed to less than 1 % of total annual discards from 2011-2024. Decision not to impute consistent with SEDAR 62.
Effort	1981 Wave1 (TX-FLW)	Yes	Effort is not species-specific, need to account for effort in Wave1 before MRIP started
Effort	1981 - 1983 (Texas)	Yes	Effort is not species-specific, need to account for Texas effort in 1981-1983 before TPWD started

Catch and Sample Size Information for Particular Domains:

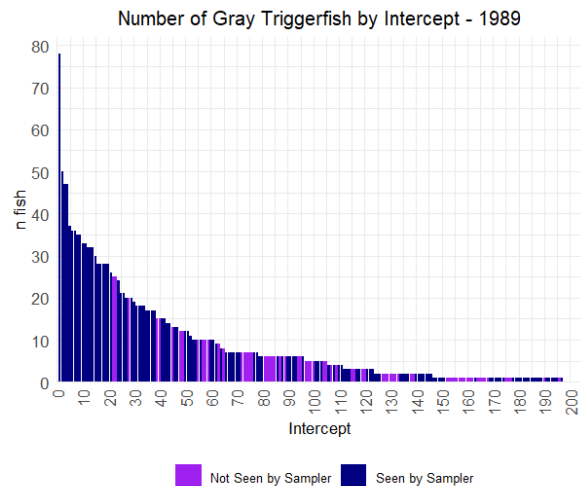
Annual estimates that appear relatively large/small compared to the adjacent years were further investigated by identifying and summarizing which strata were disproportionately contributing to the estimate. Estimates investigated are more likely to be high given the inherent zero-boundary constraint in catch data (≥ 0) that complicates identification of low estimates.

- **1982 landings estimate: 1,287,686 fish**
 - *Stratum: FLW, Charter, Wave 3, and Ocean > 10 miles*
 - Intercept Records: a total of 6 angler trips that resulted in a landings estimate of 580,139 fish (45.0% of the total annual estimate)
 - Five of the angler trips had harvest seen by the dockside interviewer. These trips had retained catches of 2, 9, 15, 60, and 100 Gray Triggerfish. These fish were all seen by the dockside sampler, suggesting species identifications were not influenced by angler recall and the number of fish harvested was accurately recorded.
 - One angler trip caught 4 Gray Triggerfish not seen by the dockside interviewer.

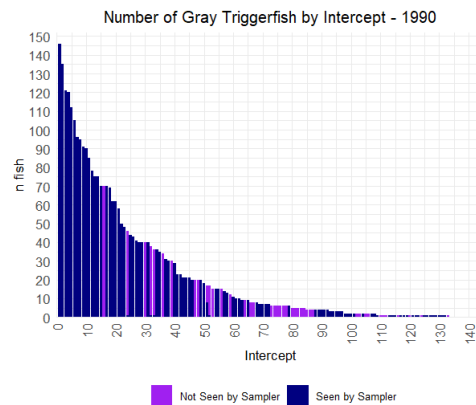
- **1987 landings estimate: 843,131 fish**
 - *Stratum: FLW, Private, Wave 6, and Ocean > 10 miles*
 - Intercept Records: a total of 4 angler trips that resulted in a landings estimate of 383,427 fish (45.5% of the total annual estimate)
 - All four of the angler trips had harvest seen by the dockside interviewer. These trips had retained catches of 1, 1, 15, and 40 Gray Triggerfish. These fish were all seen by the dockside sampler, suggesting species

identifications were not influenced by angler recall and the number of fish harvested was accurately recorded.

- *Stratum: FLW, Charter, Wave 5, and Ocean > 10 miles*
- Intercept Records: a total of 9 angler trips that resulted in a landings estimate of 67,848 fish (17.7% of the total annual estimate)
 - Five of the angler trips had harvest seen by the dockside interviewer. These trips had retained catches of 7, 12, 16, 18, and 36 Gray Triggerfish. These fish were all seen by the dockside sampler, suggesting species identifications were not influenced by angler recall and the number of fish harvested was accurately recorded.
 - Four angler trips each caught 1 Gray Triggerfish not seen by the dockside interviewer.
- **1989 landings estimate: 1,301,116 fish**
 - No single stratum contributes a disproportionately large proportion to the annual estimate.
 - There were 197 dockside intercepts positive for Gray Triggerfish catch in 1989. No single intercept contributed more than 6% to the annual estimate.
 - There were numerous intercepts (n = 61) where the number of retained Gray Triggerfish was 10 fish or higher and the majority of these intercepts were seen by the dockside interviewer. This suggests species identifications were not influenced by angler recall and the number of fish harvested was accurately recorded.

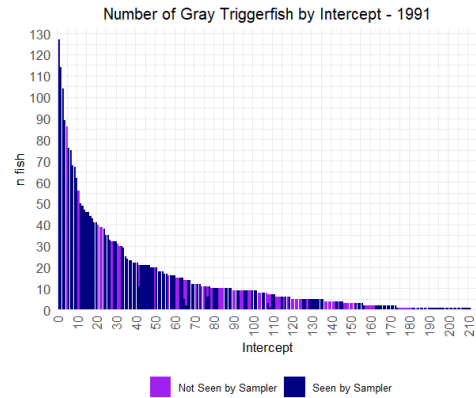


- All 18 of the angler trips had harvest seen by the dockside interviewer and two of the intercepted trips each retained over 100 Gray Triggerfish and several others had retained catches of over 50 Gray Triggerfish.
 - The number of retained Gray Triggerfish for the 18 trips in this stratum are 1, 1, 1, 2, 8, 9, 20, 23, 29, 40, 40, 50, 70, 75, 85, 90, 135 and 146. These fish were all seen by the dockside sampler, suggesting species identifications were not influenced by angler recall and the number of fish harvested was accurately recorded.
 - The trip with 8 Gray Triggerfish seen by the dockside interviewer also reported caught Gray Triggerfish that were not seen by the dockside interviewer.
- For this year, there were 133 positive intercepts for Gray Triggerfish. Several trips retained large numbers of Gray Triggerfish and the majority of these were seen by the dockside interviewer. These values are in line with catches that have been observed in other years.



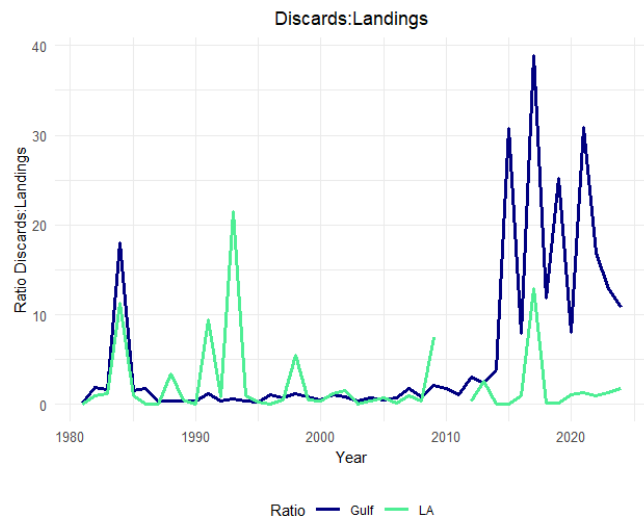
- **1991 landings estimate: 1,301,116 fish**
 - *Stratum: FLW, Charter, Wave 2, and Ocean > 10 miles*
 - Intercept Records: a total of 11 angler trips that resulted in a landings estimate of 387,938 fish (29.8% of the total annual estimate)
 - One angler trip caught 5 Gray Triggerfish that were seen by the dockside interviewer and 9 that were not seen by the interviewer.
 - The other 10 trips all had Gray Triggerfish catch that was not seen by the interviewer. The number of Gray Triggerfish reported for these trips is 2, 3, 3, 8, 9, 9, 15, 15, 30, 31, and 40.
 - *Stratum: FLW, Charter, Wave 6, and Ocean > 10 miles*
 - Intercept Records: a total of 5 angler trips that resulted in a landings estimate of 387,938 fish (29.8% of the total annual estimate)
 - Two of the trips (n = 2 and 20) had catches that were seen by the dockside interviewer.
 - Three of the trips had catch (n = 8, 11, and 16) that were not seen by the dockside interviewer.

- For this year, there were 209 positive intercepts for Gray Triggerfish. Several trips retained large numbers of Gray Triggerfish and many of these were seen by the dockside interviewer. This suggests species identifications were not influenced by angler recall and the number of fish harvested was accurately recorded.



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- **2003 landings estimate: 1,138,489 fish**
 - *Stratum: FLW, Private, Wave 3, and Ocean > 10 miles*
 - Intercept Records: a total of 10 angler trips that resulted in a landings estimate of 207,686 fish (18.2% of the total annual estimate)
 - All of the catch from the 10 intercepted angler trips had harvest seen by the dockside interviewer. Most of the trips retained a low number (n = 1, 1, 1, 1, 3, 3, 3, and 4) of fish while one trip retained 39 Gray Triggerfish.
 - *Stratum: FLW, Private, Wave 6, and Ocean ≤ 10 miles*
 - Intercept Records: a total of 3 angler trips that resulted in a landings estimate of 176,560 fish (15.5% of the total annual estimate)
 - All of the catch from the 3 intercepted angler trips had harvest seen by the dockside interviewer. Two of the trips retained a low number (n = 1 and 2) of fish while one trip retained 30 Gray Triggerfish.
- **1983 discards estimate: 816,033 fish**
 - Only 24 intercepts were positive for discarded Gray Triggerfish or unidentified Triggerfish Family in 1983.
 - *Stratum: FLW, Private, Wave 6, and Ocean > 10 miles*
 - Intercept Records: a total of 1 angler trip that resulted in a discard estimate of 390,650 fish (47.9% of the total annual estimate)
 - One angler trip reported 6 discarded unidentified Triggerfish
 - This sample weight for the associated site is relatively large and accounted for 37.2% of the summed sample weights for 1983

- *Stratum: LA, Private, Wave 1, and Ocean > 3 miles*
- Intercept Records: a total of 3 angler trips that resulted in a discard estimate of 241,843 fish (29.6% of the total annual estimate)
 - Two angler trips each reported 6 discarded unidentified Triggerfish and one angler trip reported 4 discarded unidentified Triggerfish
 - This sample weights for the associated sites are elevated
- *Stratum: LA, Private, Wave 2, and Ocean > 3 miles*
- Intercept Records: a total of 2 angler trips that resulted in a discard estimate of 118,983 fish (29.6% of the total annual estimate)
 - One angler trip reported 8 discarded unidentified Triggerfish and the second angler trip reported 12 discarded unidentified Triggerfish
- **1993 discards estimate: 1,245,704 fish**
 - Elevated discard estimates for this year are being driven by calibrated Texas estimates for the private mode that were imputed based on applying the annual, mode-specific ratios of LA discards:landings (B2:AB1)
 - For 1993, this B2:AB1 ratio = 21.5 and is much larger than the ratios from the adjacent years that are between 0-1
- **1998 discards estimate: 865,344 fish**
 - Elevated discard estimates for this year are being driven by calibrated Texas estimates for the private mode that were imputed based on applying the annual, mode-specific ratios of LA discards:landings (B2:AB1)
 - For 1998, this B2:AB1 ratio = 5.54 and is much larger than the ratios from the adjacent years that are between 0-1
- **2017 discards estimate: 3,371,188 fish**
 - There were 813 positive intercepts for discarded Gray Triggerfish
 - No intercept contributed more than 5% to the total annual discard estimate



Discussion

Elevated landings estimates in the first half of the time series do correspond to high catches being observed in the dockside intercept survey. High catch trips were intercepted routinely for Gray Triggerfish in multiple strata across multiple years. The majority of these years are well-sampled with a large number of positive dockside intercepts, and a single intercept is not constituting a large proportion of the total landings estimate. This suggests that these higher estimates reflect the true trends in the Gen Rec fishery during this time.

Elevated discard estimates in 1983 are driven by elevated sample weights (i.e. WP_CATCH) as this year is not as well sampled as other years. The particular sample driving the elevated catch from 1983 is from an intercept where unidentified Triggerfish catch was assigned to Gray Triggerfish. This estimate appears to reflect variability in the early years of the MRIP survey.

After 2015, discards do appear to be well sampled and the increasing trend in discards corresponds to changes in management regulations that are associated with reduced bag limits and an increased minimum size limit in 2018.

The higher discard estimates in 1993 and 1998 are being driven by Texas discard estimates that are imputed using the ratio of Louisiana discards:landings (B2:AB1). The associated B2:AB1 ratios for Louisiana in these years are higher than what is observed for the other years in this portion of the time series. It may be appropriate to consider using a B2:AB1 ratio from a time block (e.g. 3-year average) instead of the annual ratio for these years or to apply a Gulf-wide ratio instead of LA-specific ratio when imputing Texas discards.

Appendices

Appendix A. Additional Details of Survey Data and SEFSC Estimation

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Table 1.1. Annual landings (AB1) and discards (B2) of Gray Triggerfish in numbers of fish by state and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana).

Year	TX		LA		Total	
	AB1	B2	AB1	B2	AB1	B2
1981	7,804	0	56,835	3,046	64,639	3,046
1982	7,804	0	37,629	20,822	45,433	20,822
1983	11,825	13,680	341,466	379,592	353,291	393,273
1984	4,894	55,096	27,449	75,807	32,342	130,904
1985	6,692	0	34,345	208,114	41,037	208,114
1986	17,950	1,694	11,464	1,186	29,414	2,880
1987	16,117	0	5,146	0	21,264	0
1988	35,223	119,912	12,342	25,835	47,565	145,748
1989	11,669	6,463	97,191	57,333	108,860	63,797
1990	50,767	2,615	165,222	8,365	215,990	10,979
1991	21,538	203,075	59,670	34,150	81,208	237,224
1992	61,677	50,077	53,333	24,638	115,010	74,715
1993	43,007	924,426	11,447	70,831	54,454	995,258
1994	56,876	57,535	61,346	45,404	118,222	102,939
1995	101,138	23,876	86,999	19,218	188,137	43,094
1996	50,168	0	8,542	46	58,709	46
1997	43,887	21,976	27,168	12,932	71,054	34,908
1998	62,276	344,344	19,423	17,838	81,698	362,181
1999	25,512	11,507	76,367	34,958	101,879	46,465
2000	69,764	25,151	92,380	33,511	162,144	58,662
2001	20,538	22,582	31,233	36,363	51,771	58,945
2002	16,484	26,223	13,407	23,101	29,892	49,324
2003	13,047	1,129	16,445	1,080	29,492	2,210
2004	34,418	15,253	47,640	18,520	82,058	33,773
2005	45,031	34,067	7,484	7,250	52,515	41,317
2006	60,055	10,838	20,708	3,355	80,763	14,193
2007	28,976	26,101	20,086	13,560	49,063	39,661
2008	39,012	14,470	31,978	6,547	70,990	21,018
2009	14,999	111,841	3,799	27,312	18,798	139,153
2010	3,228	0	0	0	3,228	0
2011	10,615	0	658	0	11,273	0
2012	14,735	6,269	14,151	6,020	28,886	12,289
2013	9,754	25,094	6,747	17,840	16,501	42,935
2014	6,790	0	16,522	0	23,312	0

Year	TX		LA		Total	
	AB1	B2	AB1	B2	AB1	B2
2015	10,710	0	19,494	0	30,204	0
2016	1,744	1,816	13,273	13,438	15,017	15,253
2017	894	7,241	1,118	14,436	2,011	21,678
2018	1,913	540	13,036	2,332	14,949	2,871
2019	2,214	262	1,663	739	3,876	1,001
2020	1,689	2,471	1,275	1,375	2,965	3,846
2021	807	1,137	1,733	2,251	2,540	3,389
2022	262	268	1,087	721	1,349	988
2023	5,874	8,237	3,261	3,936	9,136	12,172
2024	605	1,138	2,021	3,764	2,626	4,902

Table 1.2. Annual landings (AB1) and discards (B2) of Gray Triggerfish in numbers of fish by state and year from all data sources (MRIP) for the **East** domain (Mississippi through western Florida). FLW excludes the Florida Keys.

Year	MS		AL		FLW		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
1981	0	0	81,089	0	425,514	63,757	506,603	63,757
1982	941	623	33,823	0	1,207,490	197,263	1,242,253	197,885
1983	0	0	20,796	1,692	246,536	421,068	267,332	422,760
1984	0	2,548	4,826	41,001	93,737	88,194	98,563	131,743
1985	0	0	0	0	200,637	3,865	200,637	3,865
1986	0	0	49,773	90	454,757	115,791	504,529	115,882
1987	5,655	0	41,470	539	774,742	208,907	821,867	209,446
1988	116	0	71,372	1,651	636,357	149,583	707,845	151,234
1989	219	21	170,911	0	1,021,125	324,000	1,192,255	324,021
1990	101,014	102,314	409,851	4,302	937,086	391,614	1,447,952	498,231
1991	1,868	0	134,076	29,409	973,190	86,216	1,109,135	115,626
1992	9,478	4,917	336,660	20,217	799,802	201,322	1,145,939	226,456
1993	4,521	45,751	174,767	45,523	674,747	159,173	854,036	250,447
1994	7,034	2	113,640	20,713	553,755	66,623	674,430	87,339
1995	20,368	86	234,010	34,022	557,955	94,187	812,333	128,295
1996	7,345	6,714	120,252	26,673	194,194	210,731	321,791	244,118
1997	2,126	2	75,134	4,109	247,116	150,053	324,376	154,163
1998	13,497	3	115,222	9,673	398,949	493,486	527,667	503,162
1999	3,385	4,552	94,507	19,792	300,188	244,480	398,080	268,824
2000	575	0	72,818	22,212	197,644	84,300	271,037	106,512
2001	552	0	95,744	35,197	284,089	241,652	380,385	276,848
2002	3,268	1,695	284,786	38,662	621,597	637,265	909,651	677,622
2003	1,497	4,040	128,601	2,835	978,899	421,944	1,108,998	428,819
2004	39,993	4,425	167,688	41,061	720,941	568,993	928,622	614,479
2005	0	0	192,836	27,290	475,841	248,729	668,678	276,019
2006	0	0	52,896	68,732	363,077	172,561	415,973	241,293
2007	0	0	68,644	168,085	307,943	416,516	376,587	584,601
2008	0	0	26,463	8,599	235,549	191,028	262,012	199,627
2009	5,284	0	51,888	41,383	82,437	228,504	139,609	269,887
2010	0	0	59,200	20,360	227,384	473,681	286,584	494,042
2011	0	0	65,290	122,756	361,428	369,258	426,718	492,014
2012	0	0	16,254	7,507	179,993	637,078	196,246	644,585
2013	13	0	42,600	59,478	263,715	692,472	306,328	751,950
2014	0	0	7,753	66,897	115,882	483,373	123,635	550,270

Year	MS		AL		FLW		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
2015	0	1,200	17,679	155,300	32,861	1,591,908	50,540	1,748,408
2016	243	10,999	100,172	482,500	187,639	1,659,325	288,054	2,152,824
2017	0	1,271	5,095	541,982	77,696	2,806,258	82,791	3,349,510
2018	0	8,262	47,948	233,216	135,119	1,753,338	183,067	1,994,816
2019	10	12,259	20,744	430,722	71,858	1,467,178	92,612	1,910,159
2020	0	2,152	32,058	359,690	172,438	1,357,590	204,496	1,719,432
2021	0	65,939	14,641	180,242	90,820	2,115,479	105,461	2,361,660
2022	0	686	40,520	470,787	163,643	2,424,299	204,164	2,895,773
2023	510	12,503	34,067	323,206	144,328	1,705,830	178,906	2,041,538
2024	0	19,370	40,726	343,737	153,065	1,711,291	193,791	2,074,398

Table 2.1. Annual landings (AB1) and discards (B2) of Gray Triggerfish in numbers of fish by mode and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana). Note catch from the combined private-shore fishing mode in the LA Creel survey is added to the private mode.

Year	Hbt		Cbt		Priv		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
1981	1,120	245	12,809	2,801	50,710	0	64,639	3,046
1982	3,025	951	34,605	10,886	7,804	8,985	45,433	20,822
1983	1,120	55	12,813	626	339,358	392,592	353,291	393,273
1984	1,668	29	19,080	334	11,594	130,540	32,342	130,904
1985	2,761	0	31,585	0	6,692	208,114	41,037	208,114
1986			1,566	252	27,848	2,628	29,414	2,880
1987			1,539	0	19,724	0	21,264	0
1988			4,764	0	42,801	145,748	47,565	145,748
1989			40	3,316	108,820	60,481	108,860	63,797
1990			2,897	0	213,093	10,979	215,990	10,979
1991			56,719	6,072	24,489	231,153	81,208	237,224
1992			24,818	1,486	90,192	73,230	115,010	74,715
1993			8,152	0	46,302	995,258	54,454	995,258
1994			22,981	6,262	95,241	96,677	118,222	102,939
1995			16,026	2,443	172,111	40,650	188,137	43,094
1996			2,446	46	56,263	0	58,709	46
1997			4,797	1,437	66,258	33,471	71,054	34,908
1998			16,361	91	65,337	362,090	81,698	362,181
1999			1,051	0	100,828	46,465	101,879	46,465
2000			1,550	765	160,594	57,897	162,144	58,662
2001			2,127	0	49,644	58,945	51,771	58,945
2002			3,923	8,445	25,969	40,879	29,892	49,324
2003			4,574	21	24,918	2,188	29,492	2,210
2004			7,941	307	74,116	33,465	82,058	33,773
2005			3,911	4,681	48,604	36,636	52,515	41,317
2006			2,621	0	78,143	14,193	80,763	14,193
2007			6,219	0	42,843	39,661	49,063	39,661
2008			15,457	0	55,533	21,018	70,990	21,018
2009			261	0	18,537	139,153	18,798	139,153
2010			56	0	3,172	0	3,228	0
2011			690	0	10,583	0	11,273	0
2012			0	0	28,886	12,289	28,886	12,289
2013			32	425	16,469	42,509	16,501	42,935

Year	Hbt		Cbt		Priv		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
2014			43	0	23,269	0	23,312	0
2015			310	0	29,894	0	30,204	0
2016			17	92	15,000	15,161	15,017	15,253
2017			0	0	2,011	21,678	2,011	21,678
2018			155	41	14,794	2,830	14,949	2,871
2019			12	456	3,864	545	3,876	1,001
2020			5	20	2,960	3,826	2,965	3,846
2021			11	23	2,529	3,366	2,540	3,389
2022			338	0	1,011	988	1,349	988
2023			362	11	8,774	12,161	9,136	12,172
2024			100	297	2,526	4,606	2,626	4,902

Table 2.2. Annual landings (AB1) and discards (B2) of Gray Triggerfish in numbers of fish by mode and year from all data sources (MRIP) for the **East** domain (Mississippi through western Florida).

Year	Hbt		Cbt		Priv		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
1981	45,312	3,947	72,449	6,311	388,842	53,499	506,603	63,757
1982	439,134	3,496	702,123	5,590	100,996	188,799	1,242,253	197,885
1983	46,969	4,449	75,098	7,114	145,266	411,198	267,332	422,760
1984	36,068	0	57,669	0	4,826	131,743	98,563	131,743
1985	26,871	389	42,963	621	130,803	2,854	200,637	3,865
1986			450,415	4,069	54,114	111,813	504,529	115,882
1987			281,577	3,763	540,290	205,682	821,867	209,446
1988			229,154	1,923	478,690	149,312	707,845	151,234
1989			375,257	5,640	816,998	318,382	1,192,255	324,021
1990			892,836	216,342	555,116	281,889	1,447,952	498,231
1991			998,524	11,601	110,611	104,024	1,109,135	115,626
1992			551,308	19,034	594,631	207,422	1,145,939	226,456
1993			406,437	41,507	447,599	208,940	854,036	250,447
1994			434,238	5,853	240,191	81,486	674,430	87,339
1995			618,032	65,758	194,301	62,537	812,333	128,295
1996			140,791	31,411	181,000	212,707	321,791	244,118
1997			148,372	22,668	176,004	131,495	324,376	154,163
1998			136,198	54,889	391,469	448,273	527,667	503,162
1999			144,042	21,282	254,038	247,542	398,080	268,824
2000			81,537	7,382	189,501	99,130	271,037	106,512
2001			127,683	16,902	252,702	259,946	380,385	276,848
2002			138,838	9,638	770,813	667,984	909,651	677,622
2003			140,582	9,864	968,416	418,955	1,108,998	428,819
2004			184,748	22,427	743,875	592,052	928,622	614,479
2005			147,322	18,369	521,356	257,650	668,678	276,019
2006			98,093	10,635	317,880	230,658	415,973	241,293
2007			76,553	16,857	300,033	567,744	376,587	584,601
2008			53,980	13,298	208,031	186,330	262,012	199,627
2009			35,754	65,097	103,854	204,790	139,609	269,887
2010			30,779	37,761	255,805	456,281	286,584	494,042
2011			72,899	112,695	353,819	379,318	426,718	492,014
2012			15,780	63,071	180,466	581,514	196,246	644,585
2013			30,100	85,260	276,228	666,690	306,328	751,950
2014			15,421	131,176	108,214	419,094	123,635	550,270

Year	Hbt		Cbt		Priv		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
2015			370	202,416	50,169	1,545,992	50,540	1,748,408
2016			62,729	358,386	225,325	1,794,438	288,054	2,152,824
2017			8,967	475,491	73,824	2,874,019	82,791	3,349,510
2018			45,320	364,917	137,747	1,629,900	183,067	1,994,816
2019			28,681	295,910	63,931	1,614,250	92,612	1,910,159
2020			35,939	355,933	168,557	1,363,499	204,496	1,719,432
2021			44,809	489,124	60,652	1,872,536	105,461	2,361,660
2022			50,438	305,686	153,726	2,590,087	204,164	2,895,773
2023			59,791	507,428	119,115	1,534,110	178,906	2,041,538
2024			35,326	350,522	158,464	1,723,876	193,791	2,074,398

Table 2.3. Annual landings (AB1) and discards (B2) of Gray Triggerfish in numbers of fish by mode and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **Gulf of America** (Texas to western Florida). Note catch from the combined private-shore fishing mode in the LA Creel survey is added to the private mode.

Year	Hbt		Cbt		Priv		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
1981	46,432	4,192	85,258	9,112	439,552	53,499	571,242	66,803
1982	442,158	4,448	736,728	16,476	108,800	197,783	1,287,686	218,707
1983	48,089	4,504	87,911	7,739	484,624	803,790	620,623	816,033
1984	37,736	29	76,749	334	16,421	262,283	130,905	262,646
1985	29,631	389	74,547	621	137,495	210,968	241,674	211,978
1986			451,982	4,320	81,962	114,441	533,943	118,761
1987			283,117	3,763	560,014	205,682	843,131	209,446
1988			233,918	1,923	521,492	295,059	755,410	296,982
1989			375,297	8,955	925,818	378,863	1,301,116	387,818
1990			895,732	216,342	768,209	292,868	1,663,941	509,210
1991			1,055,243	17,673	135,100	335,177	1,190,343	352,850
1992			576,125	20,520	684,824	280,651	1,260,949	301,171
1993			414,588	41,507	493,901	1,204,197	908,490	1,245,704
1994			457,219	12,115	335,432	178,163	792,651	190,278
1995			634,058	68,201	366,412	103,188	1,000,470	171,389
1996			143,237	31,457	237,264	212,707	380,501	244,164
1997			153,169	24,105	242,261	164,966	395,430	189,071
1998			152,559	54,980	456,806	810,363	609,366	865,344
1999			145,093	21,282	354,866	294,007	499,959	315,290
2000			83,087	8,147	350,095	157,027	433,182	165,174
2001			129,810	16,902	302,346	318,891	432,156	335,793
2002			142,760	18,083	796,782	708,863	939,542	726,946
2003			145,156	9,886	993,334	421,143	1,138,489	431,029
2004			192,689	22,735	817,991	625,517	1,010,680	648,252
2005			151,233	23,050	569,959	294,286	721,193	317,336
2006			100,714	10,635	396,023	244,851	496,736	255,486
2007			82,773	16,857	342,877	607,405	425,650	624,262
2008			69,438	13,298	263,564	207,348	333,002	220,645
2009			36,015	65,097	122,392	343,943	158,407	409,040
2010			30,835	37,761	258,976	456,281	289,812	494,042
2011			73,589	112,695	364,402	379,318	437,991	492,014
2012			15,780	63,071	209,352	593,803	225,132	656,874
2013			30,132	85,685	292,697	709,199	322,829	794,885

Year	Hbt		Cbt		Priv		Total	
	AB1	B2	AB1	B2	AB1	B2	AB1	B2
2014			15,464	131,176	131,483	419,094	146,947	550,270
2015			680	202,416	80,063	1,545,992	80,744	1,748,408
2016			62,746	358,478	240,325	1,809,600	303,071	2,168,077
2017			8,967	475,491	75,836	2,895,697	84,803	3,371,188
2018			45,475	364,958	152,540	1,632,730	198,016	1,997,687
2019			28,693	296,366	67,795	1,614,794	96,488	1,911,160
2020			35,944	355,953	171,517	1,367,325	207,461	1,723,277
2021			44,820	489,147	63,180	1,875,901	108,001	2,365,049
2022			50,776	305,686	154,737	2,591,075	205,513	2,896,761
2023			60,153	507,439	127,889	1,546,271	188,041	2,053,710
2024			35,426	350,818	160,991	1,728,482	196,417	2,079,300

Table 3.1. Gray Triggerfish landings in numbers of fish (AB1) with associated coefficients of variation (CV; Dettloff et al. 2020) by mode and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt				Hbt				Priv			
	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp
1981	12,809	0.68	11 (4)	76 (6)	1,120	0.68	11 (4)	76 (6)	50,710	0.85	49 (1)	411 (1)
1982	34,605	1.00	6 (1)	71 (7)	3,025	1.00	6 (1)	71 (7)	7,804	0.03	107 (0)	854 (0)
1983	12,813	0.67	147 (4)	512 (10)	1,120	0.67	38 (3)	309 (9)	339,358	0.00	608 (19)	5,855 (19)
1984	19,080	0.43	109 (9)	456 (25)	1,668	0.43	35 (9)	306 (25)	11,594	0.58	622 (20)	4,171 (22)
1985	31,585	1.00	122 (1)	375 (3)	2,761	1.00	15 (1)	159 (3)	6,692	0.03	724 (32)	6,096 (43)
1986	1,566	0.36	203 (13)	1,034 (13)					27,848	0.19	1,059 (18)	9,738 (23)
1987	1,539	0.37	185 (10)	746 (12)					19,724	0.19	882 (22)	8,291 (28)
1988	4,764	0.85	169 (3)	523 (3)					42,801	0.10	966 (45)	8,412 (51)
1989	40	1.00	205 (1)	571 (1)					108,820	0.63	841 (30)	6,606 (38)
1990	2,897	0.81	153 (4)	462 (4)					213,093	0.36	743 (34)	4,775 (44)
1991	56,719	0.30	205 (25)	752 (32)					24,489	0.12	780 (23)	6,297 (24)
1992	24,818	0.36	253 (29)	1,128 (39)					90,192	0.11	1,017 (38)	9,954 (47)
1993	8,152	0.39	206 (11)	743 (15)					46,302	0.07	946 (32)	8,974 (41)
1994	22,981	0.71	251 (13)	798 (16)					95,241	0.26	976 (40)	10,076 (52)
1995	16,026	0.66	240 (11)	844 (13)					172,111	0.34	952 (46)	9,518 (68)
1996	2,446	0.56	288 (9)	928 (9)					56,263	0.08	1,001 (37)	9,500 (56)
1997	4,797	0.66	305 (8)	1,045 (10)					66,258	0.19	974 (43)	10,103 (59)

Year	Cbt				Hbt				Priv			
	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp
1998	16,361	0.88	349 (13)	1,394 (16)					65,337	0.07	982 (32)	10,313 (37)
1999	1,051	0.63	448 (3)	1,590 (3)					100,828	0.31	1,191 (36)	12,493 (50)
2000	1,550	0.73	465 (7)	1,830 (7)					160,594	0.28	1,211 (39)	11,619 (55)
2001	2,127	0.44	449 (13)	1,772 (13)					49,644	0.52	1,091 (33)	10,437 (43)
2002	3,923	0.33	441 (15)	1,946 (20)					25,969	0.27	1,064 (27)	10,312 (40)
2003	4,574	0.27	429 (22)	1,838 (28)					24,918	0.41	1,109 (30)	10,954 (40)
2004	7,941	0.33	454 (25)	1,876 (29)					74,116	0.38	1,194 (43)	11,654 (57)
2005	3,911	0.75	402 (13)	1,512 (16)					48,604	0.06	1,139 (36)	10,618 (48)
2006	2,621	0.46	472 (14)	2,011 (20)					78,143	0.14	1,252 (47)	12,070 (71)
2007	6,219	0.36	485 (25)	2,031 (35)					42,843	0.23	1,193 (34)	11,387 (43)
2008	15,457	0.55	433 (13)	1,679 (18)					55,533	0.28	1,209 (45)	12,055 (56)
2009	261	0.65	429 (5)	1,771 (6)					18,537	0.16	1,205 (37)	11,957 (43)
2010	56	1.00	417 (1)	1,503 (1)					3,172	0.06	1,141 (6)	10,691 (6)
2011	690	0.89	501 (4)	1,830 (5)					10,583	0.03	1,224 (20)	12,031 (26)
2012	0	0.00	485 (1)	1,988 (1)					28,886	0.34	1,276 (26)	11,839 (27)
2013	32	0.71	401 (2)	1,367 (2)					16,469	0.35	1,215 (18)	11,640 (20)
2014	43	0.00	787 (1)	2,263 (1)					23,269	0.05	2,145 (31)	16,886 (34)
2015	310	0.57	872 (6)	2,877 (6)					29,894	0.04	2,204 (40)	16,618 (46)
2016	17	0.94	893 (3)	2,599 (3)					15,000	0.08	2,311 (26)	17,275 (29)
2017	0	0.00	916 (0)	2,971 (0)					2,011	0.09	2,269 (11)	17,319 (11)

Year	Cbt				Hbt				Priv			
	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp
2018	155	0.60	953 (5)	3,580 (5)					14,794	0.07	2,273 (20)	15,826 (22)
2019	12	1.00	1,039 (1)	3,698 (1)					3,864	0.06	2,278 (16)	16,266 (16)
2020	5	0.66	919 (3)	3,202 (3)					2,960	0.04	2,234 (13)	18,201 (14)
2021	11	1.00	1,067 (2)	4,034 (2)					2,529	0.07	2,193 (10)	14,243 (11)
2022	338	0.91	1,005 (4)	3,695 (4)					1,011	0.10	2,208 (11)	12,753 (12)
2023	362	0.42	1,114 (11)	4,134 (12)					8,774	0.04	2,309 (27)	14,314 (30)
2024	100	0.46	1,101 (7)	3,861 (7)					2,526	0.11	2,121 (13)	11,929 (15)

Table 3.2. Gray Triggerfish landings in numbers of fish (AB1) with associated coefficients of variation (CV; Dettloff et al. 2020) by mode and year from all data sources (MRIP) for the **East** domain (Mississippi through western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt				Hbt				Priv			
	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp
1981	72,449	0.58	65 (19)	534 (38)	45,312	0.58	65 (19)	534 (38)	388,842	0.58	172 (8)	1,369 (17)
1982	702,123	0.49	70 (17)	526 (56)	439,134	0.49	70 (17)	526 (56)	100,996	0.38	360 (15)	2,919 (17)
1983	75,098	0.38	85 (20)	1,048 (69)	46,969	0.38	85 (20)	1,048 (69)	145,266	0.62	131 (5)	1,245 (7)
1984	57,669	0.71	81 (12)	1,212 (27)	36,068	0.71	81 (12)	1,212 (27)	4,826	1.00	130 (1)	1,417 (1)
1985	42,963	0.52	74 (12)	1,101 (32)	26,871	0.52	74 (12)	1,101 (32)	130,803	0.83	178 (4)	1,515 (5)
1986	450,415	0.23	223 (56)	1,638 (237)					54,114	0.40	695 (11)	4,520 (16)
1987	281,577	0.30	212 (62)	1,729 (105)					540,290	0.71	891 (35)	6,716 (46)
1988	229,154	0.26	220 (74)	1,489 (137)					478,690	0.40	899 (36)	6,852 (50)
1989	375,257	0.32	148 (58)	1,100 (113)					816,998	0.26	554 (52)	4,500 (77)
1990	892,836	0.23	98 (46)	757 (84)					555,116	0.33	424 (25)	3,823 (35)
1991	998,524	0.30	133 (70)	1,039 (154)					110,611	0.36	466 (18)	4,067 (20)
1992	551,308	0.22	270 (142)	2,155 (218)					594,631	0.29	889 (77)	9,782 (108)
1993	406,437	0.26	139 (65)	1,088 (142)					447,599	0.35	626 (49)	7,429 (58)
1994	434,238	0.23	139 (62)	1,172 (160)					240,191	0.25	664 (46)	9,058 (54)
1995	618,032	0.33	130 (48)	967 (82)					194,301	0.26	549 (33)	7,878 (38)
1996	140,791	0.27	157 (47)	1,084 (89)					181,000	0.26	807 (39)	10,076 (48)

Year	Cbt				Hbt				Priv			
	ABI	CV	PSU	Trp	ABI	CV	PSU	Trp	ABI	CV	PSU	Trp
1997	148,372	0.20	298 (121)	1,748 (190)					176,004	0.22	757 (45)	9,887 (53)
1998	136,198	0.13	530 (203)	3,589 (286)					391,469	0.29	915 (55)	12,127 (76)
1999	144,042	0.13	709 (312)	6,329 (497)					254,038	0.19	1,251 (64)	15,563 (84)
2000	81,537	0.11	719 (295)	7,931 (493)					189,501	0.31	1,022 (33)	12,435 (38)
2001	127,683	0.12	587 (251)	6,496 (429)					252,702	0.21	1,002 (46)	14,258 (70)
2002	138,838	0.11	594 (246)	6,718 (456)					770,813	0.30	1,101 (77)	15,594 (101)
2003	140,582	0.11	728 (251)	7,660 (427)					968,416	0.32	1,219 (49)	14,619 (72)
2004	184,748	0.11	697 (301)	8,553 (645)					743,875	0.23	936 (69)	13,041 (92)
2005	147,322	0.12	556 (249)	6,860 (489)					521,356	0.22	853 (58)	12,103 (76)
2006	98,093	0.22	435 (194)	5,182 (337)					317,880	0.28	1,043 (40)	13,137 (48)
2007	76,553	0.16	449 (183)	5,271 (297)					300,033	0.22	1,052 (50)	13,395 (71)
2008	53,980	0.13	411 (146)	4,132 (232)					208,031	0.25	1,183 (35)	13,564 (45)
2009	35,754	0.16	396 (100)	3,832 (168)					103,854	0.29	1,223 (25)	14,770 (32)
2010	30,779	0.18	384 (114)	3,813 (170)					255,805	0.26	1,244 (34)	13,901 (41)
2011	72,899	0.13	469 (172)	5,271 (325)					353,819	0.24	1,306 (44)	14,112 (62)
2012	15,780	0.18	563 (67)	6,243 (110)					180,466	0.24	1,409 (31)	14,791 (46)
2013	30,100	0.27	288 (46)	2,358 (70)					276,228	0.41	1,142 (40)	11,744 (51)
2014	15,421	0.39	490 (24)	4,661 (41)					108,214	0.36	1,318 (28)	14,753 (44)
2015	370	0.62	533 (3)	4,650 (5)					50,169	0.49	1,409 (16)	14,729 (17)

Year	Cbt				Hbt				Priv			
	ABI	CV	PSU	Trp	ABI	CV	PSU	Trp	ABI	CV	PSU	Trp
2016	62,729	0.36	583 (37)	4,531 (72)					225,325	0.24	1,472 (39)	15,141 (59)
2017	8,967	0.93	500 (3)	4,295 (9)					73,824	0.62	1,178 (9)	12,857 (10)
2018	45,320	0.29	491 (34)	4,223 (64)					137,747	0.52	1,091 (22)	10,561 (37)
2019	28,681	0.53	485 (16)	3,954 (32)					63,931	0.38	1,099 (17)	10,717 (26)
2020	35,939	0.34	531 (36)	4,154 (81)					168,557	0.39	1,235 (36)	12,151 (71)
2021	44,809	0.30	591 (51)	5,804 (122)					60,652	0.41	1,126 (16)	8,993 (25)
2022	50,438	0.30	505 (56)	4,480 (101)					153,726	0.27	1,081 (35)	7,657 (50)
2023	59,791	0.27	615 (85)	7,142 (180)					119,115	0.32	1,145 (30)	8,575 (37)
2024	35,326	0.22	608 (82)	7,707 (182)					158,464	0.25	1,092 (32)	9,041 (40)

Table 3.3. Gray Triggerfish landings in numbers of fish (AB1) with associated coefficients of variation (CV; Dettloff et al. 2020) by mode and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **Gulf of America** (Texas to western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt				Hbt				Priv			
	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp
1981	85,258	0.49	76 (23)	610 (44)	46,432	0.56	76 (23)	610 (44)	439,552	0.52	221 (9)	1,780 (18)
1982	736,728	0.47	76 (18)	597 (63)	442,158	0.49	76 (18)	597 (63)	108,800	0.35	467 (15)	3,773 (17)
1983	87,911	0.35	232 (24)	1,560 (79)	48,089	0.38	123 (23)	1,357 (78)	484,624	0.60	739 (24)	7,100 (26)
1984	76,749	0.55	190 (21)	1,668 (52)	37,736	0.68	116 (21)	1,518 (52)	16,421	0.50	752 (21)	5,588 (23)
1985	74,547	0.47	196 (13)	1,476 (35)	29,631	0.50	89 (13)	1,260 (35)	137,495	0.79	902 (36)	7,611 (48)
1986	451,982	0.23	426 (69)	2,672 (250)					81,962	0.27	1,754 (29)	14,258 (39)
1987	283,117	0.30	397 (72)	2,475 (117)					560,014	0.69	1,773 (57)	15,007 (74)
1988	233,918	0.25	389 (77)	2,012 (140)					521,492	0.36	1,865 (81)	15,264 (101)
1989	375,297	0.32	353 (59)	1,671 (114)					925,818	0.24	1,395 (82)	11,106 (115)
1990	895,732	0.22	251 (50)	1,219 (88)					768,209	0.26	1,167 (59)	8,598 (79)
1991	1,055,243	0.28	338 (95)	1,791 (186)					135,100	0.29	1,246 (41)	10,364 (44)
1992	576,125	0.21	523 (171)	3,283 (257)					684,824	0.25	1,906 (115)	19,736 (155)
1993	414,588	0.26	345 (76)	1,831 (157)					493,901	0.32	1,572 (81)	16,403 (99)
1994	457,219	0.22	390 (75)	1,970 (176)					335,432	0.20	1,640 (86)	19,134 (106)
1995	634,058	0.32	370 (59)	1,811 (95)					366,412	0.21	1,501 (79)	17,396 (106)
1996	143,237	0.27	445 (56)	2,012 (98)					237,264	0.20	1,808 (76)	19,576 (104)
1997	153,169	0.20	603 (129)	2,793 (200)					242,261	0.17	1,731 (88)	19,990 (112)

Year	Cbt				Hbt				Priv			
	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp
1998	152,559	0.15	879 (216)	4,983 (302)					456,806	0.25	1,897 (87)	22,440 (113)
1999	145,093	0.13	1,157 (315)	7,919 (500)					354,866	0.17	2,442 (100)	28,056 (134)
2000	83,087	0.11	1,183 (302)	9,761 (500)					350,095	0.21	2,233 (72)	24,056 (93)
2001	129,810	0.12	1,035 (264)	8,268 (442)					302,346	0.20	2,093 (79)	24,695 (113)
2002	142,760	0.11	1,034 (261)	8,664 (476)					796,782	0.29	2,165 (104)	25,906 (141)
2003	145,156	0.11	1,156 (273)	9,498 (455)					993,334	0.31	2,328 (79)	25,573 (112)
2004	192,689	0.10	1,151 (326)	10,429 (674)					817,991	0.21	2,130 (112)	24,695 (149)
2005	151,233	0.12	958 (262)	8,372 (505)					569,959	0.20	1,992 (94)	22,721 (124)
2006	100,714	0.22	907 (208)	7,193 (357)					396,023	0.22	2,295 (87)	25,207 (119)
2007	82,773	0.15	934 (208)	7,302 (332)					342,877	0.19	2,245 (84)	24,782 (114)
2008	69,438	0.16	844 (159)	5,811 (250)					263,564	0.21	2,392 (80)	25,619 (101)
2009	36,015	0.15	825 (105)	5,603 (174)					122,392	0.25	2,428 (62)	26,727 (75)
2010	30,835	0.18	801 (115)	5,316 (171)					258,976	0.26	2,385 (40)	24,592 (47)
2011	73,589	0.13	970 (176)	7,101 (330)					364,402	0.23	2,530 (64)	26,143 (88)
2012	15,780	0.18	1,048 (68)	8,231 (111)					209,352	0.21	2,685 (57)	26,630 (73)
2013	30,132	0.27	689 (48)	3,725 (72)					292,697	0.39	2,357 (58)	23,384 (71)
2014	15,464	0.39	1,277 (25)	6,924 (42)					131,483	0.30	3,463 (59)	31,639 (78)
2015	680	0.43	1,405 (9)	7,527 (11)					80,063	0.31	3,613 (56)	31,347 (63)
2016	62,746	0.36	1,476 (40)	7,130 (75)					240,325	0.23	3,783 (65)	32,416 (88)
2017	8,967	0.93	1,416 (3)	7,266 (9)					75,836	0.60	3,447 (20)	30,176 (21)

Year	Cbt				Hbt				Priv			
	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp	AB1	CV	PSU	Trp
2018	45,475	0.29	1,444 (39)	7,803 (69)					152,540	0.47	3,364 (42)	26,387 (59)
2019	28,693	0.53	1,524 (17)	7,652 (33)					67,795	0.36	3,377 (33)	26,983 (42)
2020	35,944	0.34	1,450 (39)	7,356 (84)					171,517	0.38	3,469 (49)	30,352 (85)
2021	44,820	0.30	1,658 (53)	9,838 (124)					63,180	0.39	3,319 (26)	23,236 (36)
2022	50,776	0.30	1,510 (60)	8,175 (105)					154,737	0.27	3,289 (46)	20,410 (62)
2023	60,153	0.27	1,729 (96)	11,276 (192)					127,889	0.30	3,454 (57)	22,889 (67)
2024	35,426	0.22	1,709 (89)	11,568 (189)					160,991	0.25	3,213 (45)	20,970 (55)

Table 4.1. Gray Triggerfish discards in numbers of fish (B2) with associated coefficients of variation (CV; Dettloff et al. 2020) by mode and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
1981	2,801	1.00	11 (1)	76 (5)	245	1.00	11 (1)	76 (5)	0	0.00	49 (0)	411 (0)
1982	10,886	1.00	6 (1)	71 (4)	951	1.00	6 (1)	71 (4)	8,985	0.00	107 (0)	854 (0)
1983	626	1.00	147 (1)	512 (4)	55	1.00	38 (1)	309 (4)	392,592	0.00	608 (0)	5,855 (0)
1984	334	0.00	109 (0)	456 (0)	29	0.00	35 (0)	306 (0)	130,540	0.58	622 (1)	4,171 (1)
1985	0	0.00	122 (0)	375 (0)	0	0.00	15 (0)	159 (0)	208,114	0.68	724 (4)	6,096 (11)
1986	252	1.00	203 (1)	1,034 (1)					2,628	0.36	1,059 (1)	9,738 (1)
1987	0	0.00	185 (0)	746 (0)					0	0.00	882 (0)	8,291 (0)
1988	0	0.00	169 (0)	523 (0)					145,748	0.13	966 (3)	8,412 (5)
1989	3,316	1.00	205 (1)	571 (2)					60,481	0.54	841 (5)	6,606 (5)
1990	0	0.00	153 (0)	462 (0)					10,979	0.54	743 (2)	4,775 (2)
1991	6,072	0.56	205 (10)	752 (13)					231,153	0.14	780 (3)	6,297 (4)
1992	1,486	0.70	253 (6)	1,128 (9)					73,230	0.18	1,017 (6)	9,954 (10)
1993	0	0.00	206 (0)	743 (0)					995,258	0.08	946 (2)	8,974 (3)
1994	6,262	0.84	251 (3)	798 (4)					96,677	0.25	976 (5)	10,076 (11)
1995	2,443	0.71	240 (4)	844 (5)					40,650	0.42	952 (1)	9,518 (2)
1996	46	1.00	288 (1)	928 (1)					0	0.00	1,001 (0)	9,500 (0)
1997	1,437	0.83	305 (1)	1,045 (2)					33,471	0.36	974 (1)	10,103 (3)

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
1998	91	0.99	349 (1)	1,394 (1)					362,090	0.12	982 (2)	10,313 (2)
1999	0	0.00	448 (0)	1,590 (0)					46,465	0.33	1,191 (8)	12,493 (10)
2000	765	0.79	465 (2)	1,830 (2)					57,897	0.52	1,211 (2)	11,619 (3)
2001	0	0.00	449 (0)	1,772 (0)					58,945	0.51	1,091 (3)	10,437 (5)
2002	8,445	0.84	441 (4)	1,946 (14)					40,879	0.30	1,064 (4)	10,312 (4)
2003	21	0.96	429 (1)	1,838 (1)					2,188	0.49	1,109 (1)	10,954 (1)
2004	307	0.56	454 (3)	1,876 (4)					33,465	0.30	1,194 (5)	11,654 (6)
2005	4,681	0.93	402 (1)	1,512 (5)					36,636	0.10	1,139 (2)	10,618 (2)
2006	0	0.00	472 (0)	2,011 (0)					14,193	0.13	1,252 (5)	12,070 (7)
2007	0	0.00	485 (0)	2,031 (0)					39,661	0.22	1,193 (3)	11,387 (7)
2008	0	0.00	433 (0)	1,679 (0)					21,018	0.23	1,209 (4)	12,055 (7)
2009	0	0.00	429 (0)	1,771 (0)					139,153	0.18	1,205 (2)	11,957 (8)
2010	0	0.00	417 (0)	1,503 (0)					0	0.00	1,141 (0)	10,691 (0)
2011	0	0.00	501 (0)	1,830 (0)					0	0.00	1,224 (0)	12,031 (0)
2012	0	0.00	485 (0)	1,988 (0)					12,289	0.49	1,276 (1)	11,839 (1)
2013	425	1.00	401 (1)	1,367 (1)					42,509	0.37	1,215 (4)	11,640 (10)
2014	0	0.00	787 (0)	2,263 (0)					0	0.00	2,145 (0)	16,886 (0)
2015	0	0.00	872 (0)	2,877 (0)					0	0.00	2,204 (0)	16,618 (0)
2016	92	0.40	893 (2)	2,599 (2)					15,161	0.09	2,311 (13)	17,275 (14)
2017	0	0.00	916 (0)	2,971 (0)					21,678	0.05	2,269 (14)	17,319 (16)

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
2018	41	0.39	953 (1)	3,580 (1)					2,830	0.11	2,273 (6)	15,826 (7)
2019	456	0.45	1,039 (6)	3,698 (6)					545	0.06	2,278 (3)	16,266 (4)
2020	20	0.74	919 (2)	3,202 (2)					3,826	0.06	2,234 (7)	18,201 (8)
2021	23	0.58	1,067 (1)	4,034 (1)					3,366	0.06	2,193 (6)	14,243 (6)
2022	0	0.00	1,005 (0)	3,695 (0)					988	0.12	2,208 (5)	12,753 (5)
2023	11	0.73	1,114 (2)	4,134 (2)					12,161	0.07	2,309 (14)	14,314 (14)
2024	297	0.60	1,101 (6)	3,861 (6)					4,606	0.09	2,121 (7)	11,929 (7)

Table 4.2. Gray Triggerfish discards in numbers of fish (B2) with associated coefficients of variation (CV; Dettloff et al. 2020) by mode and year from all data sources (MRIP) for the **East** domain (Mississippi through western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
1981	6,311	0.97	65 (3)	534 (4)	3,947	0.97	65 (3)	534 (4)	53,499	0.72	172 (3)	1,369 (4)
1982	5,590	1.00	70 (1)	526 (1)	3,496	1.00	70 (1)	526 (1)	188,799	0.66	360 (10)	2,919 (11)
1983	7,114	0.58	85 (4)	1,048 (5)	4,449	0.58	85 (4)	1,048 (5)	411,198	0.60	131 (3)	1,245 (3)
1984	0	0.00	81 (0)	1,212 (0)	0	0.00	81 (0)	1,212 (0)	131,743	1.00	130 (1)	1,417 (1)
1985	621	0.82	74 (2)	1,101 (2)	389	0.82	74 (2)	1,101 (2)	2,854	1.00	178 (1)	1,515 (1)
1986	4,069	1.00	223 (2)	1,638 (2)					111,813	0.92	695 (2)	4,520 (2)
1987	3,763	0.59	212 (5)	1,729 (5)					205,682	0.68	891 (12)	6,716 (15)
1988	1,923	0.62	220 (5)	1,489 (11)					149,312	0.75	899 (9)	6,852 (14)
1989	5,640	0.75	148 (4)	1,100 (5)					318,382	0.29	554 (24)	4,500 (37)
1990	216,342	0.62	98 (7)	757 (12)					281,889	0.43	424 (11)	3,823 (19)
1991	11,601	0.46	133 (19)	1,039 (28)					104,024	0.58	466 (11)	4,067 (16)
1992	19,034	0.45	270 (22)	2,155 (28)					207,422	0.23	889 (44)	9,782 (73)
1993	41,507	0.56	139 (11)	1,088 (15)					208,940	0.33	626 (23)	7,429 (31)
1994	5,853	0.46	139 (11)	1,172 (11)					81,486	0.32	664 (17)	9,058 (28)
1995	65,758	0.63	130 (14)	967 (37)					62,537	0.35	549 (15)	7,878 (20)
1996	31,411	0.44	157 (12)	1,084 (27)					212,707	0.44	807 (23)	10,076 (30)
1997	22,668	0.47	298 (24)	1,748 (32)					131,495	0.38	757 (23)	9,887 (33)

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
1998	54,889	0.35	530 (38)	3,589 (87)					448,273	0.39	915 (40)	12,127 (66)
1999	21,282	0.19	709 (94)	6,329 (150)					247,542	0.25	1,251 (51)	15,563 (71)
2000	7,382	0.28	719 (49)	7,931 (73)					99,130	0.44	1,022 (18)	12,435 (24)
2001	16,902	0.21	587 (77)	6,496 (160)					259,946	0.23	1,002 (45)	14,258 (65)
2002	9,638	0.35	594 (44)	6,718 (90)					667,984	0.44	1,101 (46)	15,594 (82)
2003	9,864	0.19	728 (66)	7,660 (115)					418,955	0.47	1,219 (26)	14,619 (46)
2004	22,427	0.20	697 (94)	8,553 (208)					592,052	0.33	936 (45)	13,041 (66)
2005	18,369	0.28	556 (74)	6,860 (165)					257,650	0.27	853 (26)	12,103 (50)
2006	10,635	0.29	435 (49)	5,182 (122)					230,658	0.33	1,043 (27)	13,137 (42)
2007	16,857	0.23	449 (64)	5,271 (134)					567,744	0.31	1,052 (46)	13,395 (76)
2008	13,298	0.23	411 (48)	4,132 (134)					186,330	0.49	1,183 (19)	13,564 (25)
2009	65,097	0.28	396 (76)	3,832 (269)					204,790	0.27	1,223 (28)	14,770 (40)
2010	37,761	0.20	384 (93)	3,813 (333)					456,281	0.40	1,244 (24)	13,901 (61)
2011	112,695	0.15	469 (135)	5,271 (726)					379,318	0.32	1,306 (27)	14,112 (47)
2012	63,071	0.14	563 (135)	6,243 (595)					581,514	0.28	1,409 (40)	14,791 (75)
2013	85,260	0.26	288 (51)	2,358 (173)					666,690	0.60	1,142 (40)	11,744 (73)
2014	131,176	0.20	490 (92)	4,661 (432)					419,094	0.19	1,318 (73)	14,753 (158)
2015	202,416	0.17	533 (117)	4,650 (518)					1,545,992	0.28	1,409 (90)	14,729 (233)
2016	358,386	0.34	583 (115)	4,531 (562)					1,794,438	0.19	1,472 (136)	15,141 (310)
2017	475,491	0.22	500 (96)	4,295 (497)					2,874,019	0.19	1,178 (117)	12,857 (313)

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
2018	364,917	0.29	491 (102)	4,223 (533)					1,629,900	0.40	1,091 (76)	10,561 (158)
2019	295,910	0.19	485 (118)	3,954 (490)					1,614,250	0.22	1,099 (89)	10,717 (194)
2020	355,933	0.26	531 (98)	4,154 (499)					1,363,499	0.22	1,235 (93)	12,151 (246)
2021	489,124	0.21	591 (137)	5,804 (901)					1,872,536	0.32	1,126 (76)	8,993 (215)
2022	305,686	0.19	505 (129)	4,480 (725)					2,590,087	0.25	1,081 (97)	7,657 (237)
2023	507,428	0.23	615 (186)	7,142 (1,266)					1,534,110	0.17	1,145 (96)	8,575 (223)
2024	350,522	0.20	608 (178)	7,707 (1,171)					1,723,876	0.27	1,092 (82)	9,041 (207)

Table 4.3. Gray Triggerfish discards in numbers of fish (B2) with associated coefficients of variation (CV; Dettloff et al. 2020) by mode and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **Gulf of America** (Texas to western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
1981	9,112	0.72	76 (4)	610 (9)	4,192	0.90	76 (4)	610 (9)	53,499	0.72	221 (3)	1,780 (4)
1982	16,476	0.84	76 (2)	597 (5)	4,448	0.72	76 (2)	597 (5)	197,783	0.66	467 (10)	3,773 (11)
1983	7,739	0.54	232 (5)	1,560 (9)	4,504	0.58	123 (5)	1,357 (9)	803,790	0.59	739 (3)	7,100 (3)
1984	334	0.00	190 (0)	1,668 (0)	29	0.00	116 (0)	1,518 (0)	262,283	0.56	752 (2)	5,588 (2)
1985	621	0.82	196 (2)	1,476 (2)	389	0.82	89 (2)	1,260 (2)	210,968	0.67	902 (5)	7,611 (12)
1986	4,320	0.78	426 (3)	2,672 (3)					114,441	0.90	1,754 (3)	14,258 (3)
1987	3,763	0.59	397 (5)	2,475 (5)					205,682	0.68	1,773 (12)	15,007 (15)
1988	1,923	0.62	389 (5)	2,012 (11)					295,059	0.37	1,865 (12)	15,264 (19)
1989	8,955	0.60	353 (5)	1,671 (7)					378,863	0.26	1,395 (29)	11,106 (42)
1990	216,342	0.62	251 (7)	1,219 (12)					292,868	0.42	1,167 (13)	8,598 (21)
1991	17,673	0.36	338 (29)	1,791 (41)					335,177	0.21	1,246 (14)	10,364 (20)
1992	20,520	0.42	523 (28)	3,283 (37)					280,651	0.17	1,906 (50)	19,736 (83)
1993	41,507	0.56	345 (11)	1,831 (15)					1,204,197	0.09	1,572 (25)	16,403 (34)
1994	12,115	0.49	390 (14)	1,970 (15)					178,163	0.20	1,640 (22)	19,134 (39)
1995	68,201	0.61	370 (18)	1,811 (42)					103,188	0.27	1,501 (16)	17,396 (22)
1996	31,457	0.44	445 (13)	2,012 (28)					212,707	0.44	1,808 (23)	19,576 (30)
1997	24,105	0.44	603 (25)	2,793 (34)					164,966	0.31	1,731 (24)	19,990 (36)

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
1998	54,980	0.35	879 (39)	4,983 (88)					810,363	0.22	1,897 (42)	22,440 (68)
1999	21,282	0.19	1,157 (94)	7,919 (150)					294,007	0.21	2,442 (59)	28,056 (81)
2000	8,147	0.27	1,183 (51)	9,761 (75)					157,027	0.34	2,233 (20)	24,056 (27)
2001	16,902	0.21	1,035 (77)	8,268 (160)					318,891	0.20	2,093 (48)	24,695 (70)
2002	18,083	0.44	1,034 (48)	8,664 (104)					708,863	0.41	2,165 (50)	25,906 (86)
2003	9,886	0.19	1,156 (67)	9,498 (116)					421,143	0.47	2,328 (27)	25,573 (47)
2004	22,735	0.20	1,151 (97)	10,429 (212)					625,517	0.31	2,130 (50)	24,695 (72)
2005	23,050	0.30	958 (75)	8,372 (170)					294,286	0.24	1,992 (28)	22,721 (52)
2006	10,635	0.29	907 (49)	7,193 (122)					244,851	0.32	2,295 (32)	25,207 (49)
2007	16,857	0.23	934 (64)	7,302 (134)					607,405	0.29	2,245 (49)	24,782 (83)
2008	13,298	0.23	844 (48)	5,811 (134)					207,348	0.45	2,392 (23)	25,619 (32)
2009	65,097	0.28	825 (76)	5,603 (269)					343,943	0.18	2,428 (30)	26,727 (48)
2010	37,761	0.20	801 (93)	5,316 (333)					456,281	0.40	2,385 (24)	24,592 (61)
2011	112,695	0.15	970 (135)	7,101 (726)					379,318	0.32	2,530 (27)	26,143 (47)
2012	63,071	0.14	1,048 (135)	8,231 (595)					593,803	0.28	2,685 (41)	26,630 (76)
2013	85,685	0.26	689 (52)	3,725 (174)					709,199	0.56	2,357 (44)	23,384 (83)
2014	131,176	0.20	1,277 (92)	6,924 (432)					419,094	0.19	3,463 (73)	31,639 (158)
2015	202,416	0.17	1,405 (117)	7,527 (518)					1,545,992	0.28	3,613 (90)	31,347 (233)
2016	358,478	0.34	1,476 (117)	7,130 (564)					1,809,600	0.19	3,783 (149)	32,416 (324)
2017	475,491	0.22	1,416 (96)	7,266 (497)					2,895,697	0.19	3,447 (131)	30,176 (329)

Year	Cbt				Hbt				Priv			
	B2	CV	PSU	Trp	B2	CV	PSU	Trp	B2	CV	PSU	Trp
2018	364,958	0.29	1,444 (103)	7,803 (534)					1,632,730	0.40	3,364 (82)	26,387 (165)
2019	296,366	0.19	1,524 (124)	7,652 (496)					1,614,794	0.22	3,377 (92)	26,983 (198)
2020	355,953	0.26	1,450 (100)	7,356 (501)					1,367,325	0.22	3,469 (100)	30,352 (254)
2021	489,147	0.21	1,658 (138)	9,838 (902)					1,875,901	0.32	3,319 (82)	23,236 (221)
2022	305,686	0.19	1,510 (129)	8,175 (725)					2,591,075	0.25	3,289 (102)	20,410 (242)
2023	507,439	0.23	1,729 (188)	11,276 (1,268)					1,546,271	0.17	3,454 (110)	22,889 (237)
2024	350,818	0.20	1,709 (184)	11,568 (1,177)					1,728,482	0.27	3,213 (89)	20,970 (214)

Table 5.1. Gray Triggerfish landings (AB1) and discards (B2), in numbers of fish, with associated coefficients of variation (CV; Dettloff et al. 2020) by year for all modes combined from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	AB1				B2			
	Total	CV	PSU	Trp	Total	CV	PSU	Trp
1981	64,639	0.68	60 (5)	487 (7)	3,046	1.00	60 (1)	487 (5)
1982	45,433	0.83	113 (1)	925 (7)	20,822	1.00	113 (1)	925 (4)
1983	353,291	0.65	654 (23)	6,367 (29)	393,273	0.97	654 (1)	6,367 (4)
1984	32,342	0.33	665 (29)	4,627 (47)	130,904	0.58	665 (1)	4,627 (1)
1985	41,037	0.84	746 (33)	6,471 (46)	208,114	0.68	746 (4)	6,471 (11)
1986	29,414	0.18	1,150 (31)	10,772 (36)	2,880	0.34	1,150 (2)	10,772 (2)
1987	21,264	0.18	941 (32)	9,037 (40)	0	0.00	941 (0)	9,037 (0)
1988	47,565	0.12	1,008 (48)	8,935 (54)	145,748	0.13	1,008 (3)	8,935 (5)
1989	108,860	0.62	907 (31)	7,177 (39)	63,797	0.50	907 (6)	7,177 (7)
1990	215,990	0.35	791 (38)	5,237 (48)	10,979	0.54	791 (2)	5,237 (2)
1991	81,208	0.18	840 (48)	7,049 (56)	237,224	0.14	840 (13)	7,049 (17)
1992	115,010	0.11	1,110 (67)	11,082 (86)	74,715	0.17	1,110 (12)	11,082 (19)
1993	54,454	0.08	997 (43)	9,717 (56)	995,258	0.08	997 (2)	9,717 (3)
1994	118,222	0.25	1,038 (53)	10,874 (68)	102,939	0.23	1,038 (8)	10,874 (15)
1995	188,137	0.31	1,008 (57)	10,362 (81)	43,094	0.40	1,008 (5)	10,362 (7)
1996	58,709	0.08	1,070 (46)	10,428 (65)	46	1.00	1,070 (1)	10,428 (1)
1997	71,054	0.18	1,056 (51)	11,148 (69)	34,908	0.35	1,056 (2)	11,148 (5)
1998	81,698	0.18	1,093 (42)	11,707 (53)	362,181	0.12	1,093 (3)	11,707 (3)
1999	101,879	0.31	1,350 (39)	14,083 (53)	46,465	0.33	1,350 (8)	14,083 (10)
2000	162,144	0.28	1,385 (46)	13,449 (62)	58,662	0.52	1,385 (4)	13,449 (5)
2001	51,771	0.50	1,248 (44)	12,209 (56)	58,945	0.51	1,248 (3)	12,209 (5)
2002	29,892	0.24	1,239 (40)	12,258 (60)	49,324	0.29	1,239 (8)	12,258 (18)
2003	29,492	0.35	1,261 (52)	12,792 (68)	2,210	0.48	1,261 (2)	12,792 (2)
2004	82,058	0.34	1,353 (66)	13,530 (86)	33,773	0.30	1,353 (8)	13,530 (10)
2005	52,515	0.08	1,250 (46)	12,130 (64)	41,317	0.14	1,250 (3)	12,130 (7)
2006	80,763	0.13	1,390 (58)	14,081 (91)	14,193	0.13	1,390 (5)	14,081 (7)
2007	49,063	0.21	1,358 (57)	13,418 (78)	39,661	0.22	1,358 (3)	13,418 (7)
2008	70,990	0.25	1,333 (53)	13,734 (74)	21,018	0.23	1,333 (4)	13,734 (7)
2009	18,798	0.15	1,334 (40)	13,728 (49)	139,153	0.18	1,334 (2)	13,728 (8)
2010	3,228	0.06	1,248 (6)	12,194 (7)	0	0.00	1,248 (0)	12,194 (0)
2011	11,273	0.06	1,390 (22)	13,861 (31)	0	0.00	1,390 (0)	13,861 (0)
2012	28,886	0.34	1,416 (27)	13,827 (28)	12,289	0.49	1,416 (1)	13,827 (1)

Year	AB1				B2			
	Total	CV	PSU	Trp	Total	CV	PSU	Trp
2013	16,501	0.35	1,302 (19)	13,007 (22)	42,935	0.36	1,302 (5)	13,007 (11)
2014	23,312	0.05	2,233 (32)	19,149 (35)	0	0.00	2,233 (0)	19,149 (0)
2015	30,204	0.04	2,335 (44)	19,495 (52)	0	0.00	2,335 (0)	19,495 (0)
2016	15,017	0.08	2,454 (28)	19,874 (32)	15,253	0.09	2,454 (15)	19,874 (16)
2017	2,011	0.09	2,427 (11)	20,290 (11)	21,678	0.05	2,427 (14)	20,290 (16)
2018	14,949	0.07	2,430 (24)	19,406 (27)	2,871	0.11	2,430 (7)	19,406 (8)
2019	3,876	0.06	2,466 (17)	19,964 (17)	1,001	0.21	2,466 (9)	19,964 (10)
2020	2,965	0.04	2,390 (16)	21,403 (17)	3,846	0.06	2,390 (9)	21,403 (10)
2021	2,540	0.07	2,432 (11)	18,277 (13)	3,389	0.06	2,432 (7)	18,277 (7)
2022	1,349	0.24	2,426 (15)	16,448 (16)	988	0.12	2,426 (5)	16,448 (5)
2023	9,136	0.04	2,568 (37)	18,448 (42)	12,172	0.07	2,568 (16)	18,448 (16)
2024	2,626	0.10	2,423 (19)	15,790 (22)	4,902	0.09	2,423 (13)	15,790 (13)

Table 5.2. Gray Triggerfish landings (AB1) and discards (B2), in numbers of fish, with associated coefficients of variation (CV; Dettloff et al. 2020) by year for all modes combined from all data sources (MRIP) for the **East** domain (Mississippi through western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	AB1				B2			
	Total	CV	PSU	Trp	Total	CV	PSU	Trp
1981	506,603	0.48	237 (27)	1,903 (55)	63,757	0.64	237 (6)	1,903 (8)
1982	1,242,253	0.36	430 (32)	3,445 (73)	197,885	0.64	430 (11)	3,445 (12)
1983	267,332	0.38	216 (25)	2,293 (76)	422,760	0.44	216 (7)	2,293 (8)
1984	98,563	0.68	211 (13)	2,629 (28)	131,743	1.00	211 (1)	2,629 (1)
1985	200,637	0.58	252 (16)	2,616 (37)	3,865	0.77	252 (3)	2,616 (3)
1986	504,529	0.19	918 (67)	6,158 (253)	115,882	0.92	918 (4)	6,158 (4)
1987	821,867	0.48	1,103 (97)	8,445 (151)	209,446	0.68	1,103 (17)	8,445 (20)
1988	707,845	0.28	1,119 (110)	8,341 (187)	151,234	0.73	1,119 (14)	8,341 (25)
1989	1,192,255	0.20	702 (110)	5,600 (190)	324,021	0.28	702 (28)	5,600 (42)
1990	1,447,952	0.17	522 (71)	4,580 (119)	498,231	0.37	522 (18)	4,580 (31)
1991	1,109,135	0.25	599 (88)	5,106 (174)	115,626	0.52	599 (30)	5,106 (44)
1992	1,145,939	0.17	1,159 (219)	11,937 (326)	226,456	0.21	1,159 (66)	11,937 (101)
1993	854,036	0.21	765 (114)	8,517 (200)	250,447	0.29	765 (34)	8,517 (46)
1994	674,430	0.16	803 (108)	10,230 (214)	87,339	0.30	803 (28)	10,230 (39)
1995	812,333	0.23	679 (81)	8,845 (120)	128,295	0.36	679 (29)	8,845 (57)
1996	321,791	0.18	964 (86)	11,160 (137)	244,118	0.38	964 (35)	11,160 (57)
1997	324,376	0.15	1,055 (166)	11,635 (243)	154,163	0.33	1,055 (47)	11,635 (65)
1998	527,667	0.22	1,445 (258)	15,716 (362)	503,162	0.34	1,445 (78)	15,716 (153)
1999	398,080	0.13	1,960 (376)	21,892 (581)	268,824	0.22	1,960 (145)	21,892 (221)
2000	271,037	0.22	1,741 (328)	20,361 (531)	106,512	0.40	1,741 (67)	20,361 (97)
2001	380,385	0.14	1,589 (297)	20,754 (499)	276,848	0.21	1,589 (122)	20,754 (225)
2002	909,651	0.25	1,695 (323)	22,312 (557)	677,622	0.43	1,695 (90)	22,312 (172)
2003	1,108,998	0.28	1,947 (300)	22,279 (499)	428,819	0.46	1,947 (92)	22,279 (161)
2004	928,622	0.18	1,633 (370)	21,594 (737)	614,479	0.31	1,633 (139)	21,594 (274)
2005	668,678	0.17	1,409 (307)	18,963 (565)	276,019	0.25	1,409 (100)	18,963 (215)
2006	415,973	0.22	1,478 (234)	18,319 (385)	241,293	0.31	1,478 (76)	18,319 (164)
2007	376,587	0.18	1,501 (233)	18,666 (368)	584,601	0.30	1,501 (110)	18,666 (210)
2008	262,012	0.20	1,594 (181)	17,696 (277)	199,627	0.46	1,594 (67)	17,696 (159)
2009	139,609	0.22	1,619 (125)	18,602 (200)	269,887	0.21	1,619 (104)	18,602 (309)
2010	286,584	0.23	1,628 (148)	17,714 (211)	494,042	0.36	1,628 (117)	17,714 (394)
2011	426,718	0.20	1,775 (216)	19,383 (387)	492,014	0.25	1,775 (162)	19,383 (773)
2012	196,246	0.22	1,972 (98)	21,034 (156)	644,585	0.25	1,972 (175)	21,034 (670)

Year	AB1				B2			
	Total	CV	PSU	Trp	Total	CV	PSU	Trp
2013	306,328	0.37	1,430 (86)	14,102 (121)	751,950	0.53	1,430 (91)	14,102 (246)
2014	123,635	0.31	1,808 (52)	19,414 (85)	550,270	0.15	1,808 (165)	19,414 (590)
2015	50,540	0.48	1,942 (19)	19,379 (22)	1,748,408	0.23	1,942 (207)	19,379 (751)
2016	288,054	0.20	2,055 (76)	19,672 (131)	2,152,824	0.16	2,055 (251)	19,672 (872)
2017	82,791	0.56	1,678 (12)	17,152 (19)	3,349,510	0.16	1,678 (213)	17,152 (810)
2018	183,067	0.39	1,582 (56)	14,784 (101)	1,994,816	0.33	1,582 (178)	14,784 (691)
2019	92,612	0.31	1,584 (33)	14,671 (58)	1,910,159	0.17	1,584 (207)	14,671 (684)
2020	204,496	0.32	1,766 (72)	16,305 (152)	1,719,432	0.17	1,766 (191)	16,305 (745)
2021	105,461	0.25	1,717 (67)	14,797 (147)	2,361,660	0.25	1,717 (213)	14,797 (1,116)
2022	204,164	0.21	1,586 (91)	12,137 (151)	2,895,773	0.22	1,586 (226)	12,137 (962)
2023	178,906	0.23	1,760 (115)	15,717 (217)	2,041,538	0.14	1,760 (282)	15,717 (1,489)
2024	193,791	0.20	1,700 (114)	16,748 (222)	2,074,398	0.22	1,700 (260)	16,748 (1,378)

Table 5.3. Gray Triggerfish landings (AB1) and discards (B2), in numbers of fish, with associated coefficients of variation (CV; Dettloff et al. 2020) by year for all modes combined from all data sources (MRIP, LACreel 2014+, TPWD) for **Gulf of America** (Texas to western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	AB1				B2			
	Total	CV	PSU	Trp	Total	CV	PSU	Trp
1981	571,242	0.43	297 (32)	2,390 (62)	66,803	0.61	297 (7)	2,390 (13)
1982	1,287,686	0.35	543 (33)	4,370 (80)	218,707	0.61	543 (12)	4,370 (16)
1983	620,623	0.36	870 (48)	8,660 (105)	816,033	0.42	870 (8)	8,660 (12)
1984	130,905	0.53	876 (42)	7,256 (75)	262,646	0.56	876 (2)	7,256 (2)
1985	241,674	0.53	998 (49)	9,087 (83)	211,978	0.67	998 (7)	9,087 (14)
1986	533,943	0.18	2,068 (98)	16,930 (289)	118,761	0.90	2,068 (6)	16,930 (6)
1987	843,131	0.46	2,044 (129)	17,482 (191)	209,446	0.68	2,044 (17)	17,482 (20)
1988	755,410	0.26	2,127 (158)	17,276 (241)	296,982	0.37	2,127 (17)	17,276 (30)
1989	1,301,116	0.19	1,609 (141)	12,777 (229)	387,818	0.25	1,609 (34)	12,777 (49)
1990	1,663,941	0.16	1,313 (109)	9,817 (167)	509,210	0.36	1,313 (20)	9,817 (33)
1991	1,190,343	0.24	1,439 (136)	12,155 (230)	352,850	0.19	1,439 (43)	12,155 (61)
1992	1,260,949	0.16	2,269 (286)	23,019 (412)	301,171	0.16	2,269 (78)	23,019 (120)
1993	908,490	0.20	1,762 (157)	18,234 (256)	1,245,704	0.09	1,762 (36)	18,234 (49)
1994	792,651	0.14	1,841 (161)	21,104 (282)	190,278	0.19	1,841 (36)	21,104 (54)
1995	1,000,470	0.20	1,687 (138)	19,207 (201)	171,389	0.29	1,687 (34)	19,207 (64)
1996	380,501	0.16	2,034 (132)	21,588 (202)	244,164	0.38	2,034 (36)	21,588 (58)
1997	395,430	0.12	2,111 (217)	22,783 (312)	189,071	0.27	2,111 (49)	22,783 (70)
1998	609,366	0.19	2,538 (300)	27,423 (415)	865,344	0.20	2,538 (81)	27,423 (156)
1999	499,959	0.12	3,310 (415)	35,975 (634)	315,290	0.19	3,310 (153)	35,975 (231)
2000	433,182	0.17	3,125 (374)	33,810 (593)	165,174	0.32	3,125 (71)	33,810 (102)
2001	432,156	0.13	2,836 (341)	32,963 (555)	335,793	0.20	2,836 (125)	32,963 (230)
2002	939,542	0.25	2,933 (363)	34,570 (617)	726,946	0.40	2,933 (98)	34,570 (190)
2003	1,138,489	0.27	3,207 (352)	35,071 (567)	431,029	0.46	3,207 (94)	35,071 (163)
2004	1,010,680	0.16	2,986 (436)	35,124 (823)	648,252	0.29	2,986 (147)	35,124 (284)
2005	721,193	0.16	2,659 (353)	31,093 (629)	317,336	0.22	2,659 (103)	31,093 (222)
2006	496,736	0.18	2,868 (292)	32,400 (476)	255,486	0.30	2,868 (81)	32,400 (171)
2007	425,650	0.16	2,859 (290)	32,084 (446)	624,262	0.28	2,859 (113)	32,084 (217)
2008	333,002	0.17	2,927 (234)	31,430 (351)	220,645	0.41	2,927 (71)	31,430 (166)
2009	158,407	0.19	2,953 (165)	32,330 (249)	409,040	0.15	2,953 (106)	32,330 (317)
2010	289,812	0.23	2,876 (154)	29,908 (218)	494,042	0.36	2,876 (117)	29,908 (394)
2011	437,991	0.20	3,165 (238)	33,244 (418)	492,014	0.25	3,165 (162)	33,244 (773)
2012	225,132	0.20	3,388 (125)	34,861 (184)	656,874	0.25	3,388 (176)	34,861 (671)

Year	AB1				B2			
	Total	CV	PSU	Trp	Total	CV	PSU	Trp
2013	322,829	0.35	2,732 (105)	27,109 (143)	794,885	0.50	2,732 (96)	27,109 (257)
2014	146,947	0.26	4,041 (84)	38,563 (120)	550,270	0.15	4,041 (165)	38,563 (590)
2015	80,744	0.30	4,277 (63)	38,874 (74)	1,748,408	0.23	4,277 (207)	38,874 (751)
2016	303,071	0.19	4,509 (104)	39,546 (163)	2,168,077	0.16	4,509 (266)	39,546 (888)
2017	84,803	0.55	4,105 (23)	37,442 (30)	3,371,188	0.16	4,105 (227)	37,442 (826)
2018	198,016	0.36	4,012 (80)	34,190 (128)	1,997,687	0.33	4,012 (185)	34,190 (699)
2019	96,488	0.30	4,050 (50)	34,635 (75)	1,911,160	0.17	4,050 (216)	34,635 (694)
2020	207,461	0.32	4,156 (88)	37,708 (169)	1,723,277	0.17	4,156 (200)	37,708 (755)
2021	108,001	0.24	4,149 (78)	33,074 (160)	2,365,049	0.25	4,149 (220)	33,074 (1,123)
2022	205,513	0.21	4,012 (106)	28,585 (167)	2,896,761	0.22	4,012 (231)	28,585 (967)
2023	188,041	0.22	4,328 (152)	34,165 (259)	2,053,710	0.14	4,328 (298)	34,165 (1,505)
2024	196,417	0.20	4,123 (133)	32,538 (244)	2,079,300	0.22	4,123 (273)	32,538 (1,391)

Table 6.1. Gray Triggerfish landings in pounds whole weight (LBS) with associated coefficients of variation (CV; Approach 2 described in Nuttall and Dettloff 2022) by year and mode from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt		Hbt		Priv		Total	
	LBS	CV	LBS	CV	LBS	CV	LBS	CV
1981	25,194	0.74	2,202	0.68	89,446	0.85	116,842	0.71
1982	42,900	1.00	3,750	1.00	5,548	0.03	52,197	0.83
1983	67,014	0.67	5,857	0.67	1,723,212	0.00	1,796,083	0.65
1984	88,290	0.44	7,848	0.43	33,812	0.58	129,951	0.34
1985	235,934	1.00	20,621	1.00	4,182	0.03	260,737	0.84
1986	5,503	0.39			37,568	0.26	43,071	0.24
1987	5,109	0.39			28,395	0.19	33,504	0.21
1988	7,665	0.85			44,455	0.10	52,120	0.12
1989	34	1.00			191,579	0.63	191,613	0.63
1990	7,922	0.81			473,392	0.38	481,314	0.36
1991	154,927	0.31			28,328	0.12	183,255	0.20
1992	62,686	0.39			137,349	0.12	200,035	0.18
1993	20,569	0.42			65,176	0.07	85,745	0.19
1994	50,122	0.72			194,689	0.26	244,810	0.26
1995	40,190	0.67			291,095	0.35	331,285	0.33
1996	10,466	0.56			88,591	0.08	99,057	0.12
1997	10,814	0.66			110,811	0.21	121,625	0.20
1998	49,705	0.89			88,173	0.07	137,878	0.32
1999	2,360	0.63			291,950	0.36	294,310	0.35
2000	6,407	0.74			385,489	0.30	391,896	0.32
2001	3,675	0.44			96,013	0.55	99,688	0.51
2002	11,198	0.35			52,777	0.27	63,975	0.27
2003	11,141	0.28			46,286	0.41	57,427	0.36
2004	16,710	0.34			127,660	0.38	144,370	0.35
2005	12,629	0.75			73,600	0.11	86,229	0.12
2006	6,492	0.51			114,811	0.28	121,303	0.27
2007	11,715	0.38			66,717	0.27	78,432	0.24
2008	41,504	0.55			101,476	0.30	142,980	0.26
2009	542	0.65			28,963	0.28	29,505	0.26
2010	160	1.00			9,034	0.06	9,194	0.06
2011	1,803	0.89			13,441	0.03	15,244	0.08
2012	0	0.00			64,476	0.36	64,476	0.36

Year	Cbt		Hbt		Priv		Total	
	LBS	CV	LBS	CV	LBS	CV	LBS	CV
2013	46	0.71			35,099	0.36	35,145	0.36
2014	92	0.00			45,581	0.05	45,673	0.05
2015	568	0.62			58,992	0.24	59,560	0.27
2016	55	0.94			48,225	0.19	48,280	0.19
2017	0	0.00			5,929	0.09	5,929	0.09
2018	630	0.60			60,153	0.07	60,783	0.07
2019	18	1.00			10,752	0.06	10,771	0.06
2020	21	0.66			8,177	0.04	8,198	0.04
2021	42	1.00			9,633	0.07	9,675	0.07
2022	1,132	0.91			3,384	0.17	4,516	0.27
2023	1,104	0.42			22,166	0.04	23,270	0.04
2024	319	0.55			8,050	0.11	8,369	0.35

Table 6.2. Gray Triggerfish landings in pounds whole weight (LBS) with associated coefficients of variation (CV; Approach 2 described in Nuttall and Dettloff 2022) by year and mode from all data sources (MRIP) for the **East** domain (Mississippi through western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt		Hbt		Priv		Total	
	LBS	CV	LBS	CV	LBS	CV	LBS	CV
1981	117,563	0.73	73,174	0.59	924,705	0.59	1,115,442	0.57
1982	2,169,103	0.51	918,497	0.49	264,309	0.52	3,351,908	0.41
1983	141,516	0.38	122,060	0.41	359,435	0.62	623,012	0.40
1984	149,906	0.72	74,238	0.71	14,818	1.00	238,961	0.69
1985	116,671	0.53	89,952	0.54	355,211	0.83	561,834	0.59
1986	1,094,317	0.27			146,323	0.44	1,240,640	0.24
1987	771,193	0.35			1,515,704	0.73	2,286,897	0.51
1988	696,707	0.30			635,055	0.45	1,331,763	0.33
1989	884,462	0.34			1,057,186	0.31	1,941,648	0.23
1990	3,090,349	0.28			958,994	0.37	4,049,342	0.23
1991	2,564,495	0.32			263,661	0.44	2,828,156	0.28
1992	1,607,056	0.23			1,194,621	0.35	2,801,677	0.20
1993	1,139,891	0.29			1,026,473	0.39	2,166,364	0.25
1994	953,130	0.27			562,719	0.45	1,515,849	0.28
1995	1,142,354	0.35			380,891	0.28	1,523,245	0.26
1996	304,991	0.32			305,871	0.38	610,863	0.27
1997	605,812	0.23			341,626	0.31	947,438	0.20
1998	368,372	0.18			773,343	0.33	1,141,715	0.25
1999	380,152	0.15			510,448	0.24	890,600	0.15
2000	232,065	0.13			447,111	0.33	679,175	0.23
2001	294,102	0.14			446,407	0.25	740,508	0.16
2002	380,403	0.13			1,691,496	0.36	2,071,899	0.27
2003	400,408	0.13			1,819,094	0.48	2,219,503	0.32
2004	341,797	0.13			1,339,857	0.26	1,681,655	0.20
2005	273,093	0.14			963,732	0.29	1,236,825	0.20
2006	197,196	0.23			495,014	0.29	692,210	0.23
2007	167,499	0.20			511,533	0.26	679,032	0.22
2008	117,434	0.17			408,730	0.27	526,164	0.23
2009	96,973	0.19			309,801	0.34	406,774	0.25
2010	87,998	0.20			788,545	0.29	876,543	0.25
2011	202,780	0.14			998,207	0.26	1,200,987	0.21
2012	48,478	0.19			579,494	0.28	627,972	0.24

Year	Cbt		Hbt		Priv		Total	
	LBS	CV	LBS	CV	LBS	CV	LBS	CV
2013	97,819	0.30			1,079,925	0.43	1,177,744	0.39
2014	47,794	0.41			338,193	0.38	385,986	0.34
2015	1,000	0.63			114,289	0.50	115,289	0.49
2016	202,155	0.37			743,414	0.27	945,569	0.23
2017	28,534	0.93			180,615	0.62	209,149	0.56
2018	176,289	0.30			639,969	0.54	816,258	0.41
2019	132,009	0.54			362,952	0.40	494,961	0.33
2020	136,847	0.35			844,991	0.41	981,838	0.34
2021	199,510	0.32			216,702	0.42	416,212	0.27
2022	157,221	0.31			578,342	0.32	735,563	0.25
2023	203,880	0.28			442,453	0.35	646,333	0.25
2024	105,805	0.23			580,274	0.29	686,080	0.22

Table 6.3. Gray Triggerfish landings in pounds whole weight (LBS) with associated coefficients of variation (CV; Approach 2 described in Nuttall and Dettloff 2022) by year and mode from all data sources (MRIP, LACreel 2014+, TPWD) for **Gulf of America** (Texas to western Florida). Sample size is provided both as the total number of primary sampling units (PSU) and angler trips (TRP) intercepted by dockside samplers and, in parentheses, the number of PSUs and TRPs that intercepted Gray Triggerfish.

Year	Cbt		Hbt		Priv		Total	
	LBS	CV	LBS	CV	LBS	CV	LBS	CV
1981	142,757	0.68	75,376	0.58	1,014,151	0.54	1,232,285	0.53
1982	2,212,003	0.49	922,246	0.49	269,856	0.50	3,404,105	0.40
1983	208,530	0.36	127,917	0.41	2,082,647	0.61	2,419,095	0.38
1984	238,196	0.56	82,086	0.68	48,630	0.50	368,912	0.54
1985	352,605	0.48	110,573	0.52	359,393	0.79	822,571	0.54
1986	1,099,819	0.27			183,891	0.33	1,283,711	0.23
1987	776,302	0.35			1,544,099	0.71	2,320,401	0.49
1988	704,372	0.29			679,510	0.41	1,383,882	0.31
1989	884,496	0.34			1,248,765	0.28	2,133,261	0.22
1990	3,098,271	0.27			1,432,386	0.30	4,530,657	0.22
1991	2,719,422	0.30			291,989	0.38	3,011,411	0.26
1992	1,669,742	0.23			1,331,970	0.31	3,001,712	0.20
1993	1,160,460	0.29			1,091,649	0.37	2,252,109	0.24
1994	1,003,251	0.26			757,408	0.41	1,760,659	0.26
1995	1,182,544	0.34			671,986	0.24	1,854,529	0.23
1996	315,457	0.31			394,462	0.33	709,919	0.24
1997	616,626	0.23			452,437	0.27	1,069,063	0.18
1998	418,077	0.20			861,517	0.30	1,279,593	0.23
1999	382,512	0.15			802,399	0.24	1,184,910	0.15
2000	238,471	0.14			832,600	0.24	1,071,071	0.19
2001	297,777	0.14			542,420	0.24	840,197	0.16
2002	391,600	0.14			1,744,273	0.36	2,135,874	0.27
2003	411,549	0.14			1,865,380	0.47	2,276,929	0.31
2004	358,507	0.12			1,467,517	0.24	1,826,024	0.18
2005	285,722	0.14			1,037,332	0.28	1,323,055	0.19
2006	203,688	0.24			609,825	0.26	813,513	0.21
2007	179,213	0.19			578,250	0.24	757,463	0.20
2008	158,938	0.19			510,206	0.23	669,144	0.20
2009	97,515	0.18			338,764	0.31	436,278	0.22
2010	88,158	0.20			797,579	0.29	885,737	0.25
2011	204,583	0.14			1,011,648	0.25	1,216,231	0.21
2012	48,478	0.19			643,970	0.26	692,448	0.22

Year	Cbt		Hbt		Priv		Total	
	LBS	CV	LBS	CV	LBS	CV	LBS	CV
2013	97,865	0.30			1,115,024	0.41	1,212,889	0.37
2014	47,885	0.41			383,774	0.32	431,660	0.29
2015	1,568	0.49			173,281	0.35	174,849	0.36
2016	202,210	0.37			791,639	0.26	993,849	0.22
2017	28,534	0.93			186,545	0.60	215,078	0.55
2018	176,919	0.30			700,122	0.49	877,041	0.38
2019	132,027	0.54			373,704	0.38	505,732	0.32
2020	136,868	0.35			853,168	0.40	990,037	0.33
2021	199,552	0.32			226,335	0.41	425,887	0.27
2022	158,353	0.31			581,727	0.32	740,079	0.24
2023	204,985	0.28			464,619	0.32	669,604	0.24
2024	106,124	0.23			588,324	0.29	694,448	0.22

Table 7.1. Summary of weight measurements (pounds whole weight) from MRIP-intercepted Gray Triggerfish by mode and year for the West domain (Texas through Louisiana). Summaries include the number of fish weighed by MRIP and, in parentheses, the number of angler trips from which those fish were weighed (N), and the minimum (Min), arithmetic mean (Avg), standard deviation (SD), and maximum (Max) size of fish weights. Summaries include observed and imputed weights.

Year	Cbt					Hbt					Priv				
	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max
1981	10 (6)	0.7	1.3	0.6	2.9	0 (0)	0.0	0.0	0.0	0.0	6 (1)	1.9	3.1	0.8	4.1
1982	0 (0)	0.0	0.0	0.0	0.0	21 (7)	0.7	1.2	0.4	2.0	0 (0)	0.0	0.0	0.0	0.0
1983	38 (9)	0.4	5.2	4.0	11.3	0 (0)	0.0	0.0	0.0	0.0	0 (0)	0.0	0.0	0.0	0.0
1984	81 (25)	1.5	4.7	2.1	9.6	0 (0)	0.0	0.0	0.0	0.0	1 (1)	6.9	6.9	0.0	6.9
1985	20 (3)	4.2	7.5	2.5	9.3	0 (0)	0.0	0.0	0.0	0.0	0 (0)	0.0	0.0	0.0	0.0
1986	36 (13)	0.8	3.4	1.6	8.9						26 (6)	0.7	2.3	1.4	5.7
1987	32 (11)	1.2	3.1	1.4	6.0						2 (1)	1.4	1.8	0.6	2.3
1988	4 (1)	0.9	2.6	1.4	4.2						0 (0)	0.0	0.0	0.0	0.0
1989	0 (0)	0.0	0.0	0.0	0.0						16 (5)	1.1	1.9	0.3	2.2
1990	10 (2)	0.9	3.7	2.0	6.6						41 (9)	1.1	2.5	0.9	4.8
1991	227 (30)	0.8	2.6	1.0	6.5						2 (1)	3.9	3.9	0.0	3.9
1992	144 (25)	0.5	2.7	2.0	13.2						31 (12)	0.9	2.3	0.6	3.3
1993	58 (15)	0.9	2.3	1.2	5.8						2 (2)	1.3	2.1	1.1	2.8
1994	61 (15)	0.8	2.0	0.9	5.1						16 (4)	1.3	3.0	1.6	6.2
1995	55 (11)	1.0	2.6	1.0	4.8						26 (6)	1.1	2.2	0.6	3.7
1996	21 (7)	1.1	4.3	2.4	8.7						5 (3)	1.9	2.7	0.8	3.6
1997	14 (4)	1.2	3.2	1.8	6.2						20 (10)	1.3	2.1	0.7	3.8
1998	41 (11)	0.9	2.5	1.7	10.1						5 (1)	1.6	2.1	0.4	2.5
1999	1 (1)	9.7	9.7	0.0	9.7						56 (18)	0.7	3.1	1.5	7.7
2000	18 (6)	2.1	4.2	1.2	5.8						55 (13)	0.7	3.5	1.8	9.6
2001	9 (5)	1.8	2.6	0.5	3.3						9 (5)	0.9	2.0	0.9	3.9
2002	52 (17)	1.6	2.9	1.2	6.9						5 (3)	1.7	2.1	0.2	2.2

Year	Cbt					Hbt					Priv				
	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max
2003	66 (24)	1.4	2.5	0.7	5.1						11 (3)	1.3	1.8	0.3	2.2
2004	52 (23)	1.1	2.2	0.8	3.8						28 (9)	1.3	2.0	0.4	2.9
2005	15 (7)	1.9	3.4	1.0	5.0						6 (3)	1.6	2.3	0.6	3.2
2006	26 (13)	1.0	2.7	1.5	7.2						33 (11)	0.9	1.9	0.9	5.0
2007	50 (20)	0.9	2.0	0.7	4.9						8 (6)	1.2	3.1	1.5	5.0
2008	77 (6)	1.6	2.8	0.8	5.0						12 (7)	1.2	2.0	0.5	2.6
2009	1 (1)	1.3	1.3	0.0	1.3						5 (2)	1.2	1.9	0.5	2.6
2010	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2011	12 (3)	1.8	3.7	0.9	5.0						0 (0)	0.0	0.0	0.0	0.0
2012	0 (0)	0.0	0.0	0.0	0.0						10 (4)	2.2	2.8	0.5	3.5
2013	0 (0)	0.0	0.0	0.0	0.0						11 (3)	1.5	2.6	0.6	3.3
2014	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2015	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2016	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2017	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2018	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2019	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2020	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2021	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2022	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2023	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0
2024	0 (0)	0.0	0.0	0.0	0.0						0 (0)	0.0	0.0	0.0	0.0

Table 7.2. Summary of weight measurements (pounds whole weight) from MRIP-intercepted Gray Triggerfish by mode and year for the **East** domain (Mississippi through western Florida). Summaries include the number of fish weighed by MRIP and, in parentheses, the number of angler trips from which those fish were weighed (N), and the minimum (Min), arithmetic mean (Avg), standard deviation (SD), and maximum (Max) size of fish weights. Summaries include observed and imputed weights.

Year	Cbt					Hbt					Priv				
	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max
1981	65 (13)	0.7	1.9	2.3	11.7	35 (25)	0.7	1.7	0.9	3.9	54 (17)	0.7	2.4	1.9	8.4
1982	100 (23)	0.5	2.6	1.6	7.3	102 (33)	0.7	2.0	0.9	8.5	41 (17)	0.4	2.6	1.5	6.0
1983	59 (17)	0.9	2.2	1.1	9.0	97 (52)	0.9	2.4	1.5	8.3	9 (7)	1.1	2.4	2.3	8.4
1984	25 (7)	1.3	2.6	1.6	8.6	26 (19)	0.7	2.2	2.3	9.3	1 (1)	7.1	7.1	0.0	7.1
1985	14 (4)	0.9	2.4	1.1	3.7	35 (28)	0.9	3.3	2.0	7.3	13 (5)	0.2	1.4	0.5	2.2
1986	793 (235)	0.7	2.5	1.6	13.0						27 (16)	1.1	2.1	1.1	5.5
1987	502 (105)	0.4	2.8	1.8	12.2						149 (46)	0.4	2.5	1.6	8.0
1988	65 (17)	0.9	3.0	2.0	11.1						25 (12)	0.4	1.4	0.7	2.3
1989	544 (109)	0.7	2.5	1.4	14.0						228 (77)	0.4	1.3	0.5	2.9
1990	571 (84)	0.9	3.0	2.0	11.4						133 (35)	0.7	1.8	0.8	5.1
1991	984 (152)	0.4	3.3	1.9	13.2						46 (20)	0.5	2.0	1.5	5.8
1992	1,552 (186)	0.3	3.3	2.0	14.0						319 (102)	0.4	2.0	1.4	9.4
1993	696 (140)	0.8	3.2	2.0	13.9						140 (58)	0.7	2.2	1.5	8.7
1994	731 (160)	0.7	2.4	1.5	11.9						110 (54)	0.5	2.1	1.5	9.3
1995	480 (82)	0.6	2.0	1.2	9.1						106 (38)	0.4	1.9	1.1	6.8
1996	405 (89)	0.7	2.2	1.3	8.8						115 (48)	0.4	1.7	0.9	6.8
1997	843 (188)	0.9	4.3	2.6	14.0						101 (53)	0.6	2.1	1.4	7.4
1998	1,637 (285)	0.8	2.8	1.6	12.6						215 (76)	0.8	2.1	1.2	7.0
1999	2,448 (497)	0.5	2.7	1.9	13.7						174 (84)	0.8	2.1	0.9	8.0
2000	2,399 (493)	0.4	2.7	1.9	13.5						98 (38)	1.0	3.0	1.7	10.3
2001	3,073 (428)	0.5	2.1	1.4	12.2						130 (70)	0.9	2.1	1.1	6.0
2002	2,845 (455)	0.5	2.6	1.8	13.9						256 (101)	0.8	2.1	1.3	7.2

Year	Cbt					Hbt					Priv				
	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max
2003	2,707 (427)	0.4	2.5	1.6	13.5						183 (72)	0.8	2.2	1.4	9.1
2004	3,525 (645)	0.4	1.8	0.9	8.0						294 (92)	0.7	1.8	0.7	5.6
2005	2,691 (489)	0.6	1.7	0.9	8.5						165 (76)	0.9	1.9	0.9	7.7
2006	1,387 (337)	0.5	1.8	1.0	7.1						103 (48)	0.7	1.6	0.5	3.4
2007	1,020 (296)	0.5	2.2	1.1	9.0						136 (71)	0.8	1.8	0.7	4.0
2008	824 (232)	0.8	2.2	1.0	8.6						86 (45)	1.1	2.0	0.7	4.0
2009	508 (168)	0.6	2.7	1.2	8.8						58 (32)	1.0	2.9	1.6	7.1
2010	554 (170)	1.3	2.8	1.1	9.4						94 (41)	1.4	3.0	1.0	7.2
2011	1,278 (325)	1.0	2.7	1.0	8.8						122 (62)	1.5	2.9	1.0	5.3
2012	366 (110)	1.0	3.1	1.1	8.1						91 (46)	1.4	3.2	1.4	8.0
2013	221 (70)	1.2	3.2	1.5	8.6						104 (51)	1.5	3.8	1.9	8.6
2014	143 (41)	0.8	3.1	1.5	8.9						81 (44)	1.3	3.3	1.9	10.6
2015	15 (5)	1.2	2.3	0.5	2.8						45 (17)	1.1	2.7	1.1	5.7
2016	307 (72)	1.2	3.3	1.2	7.6						157 (59)	1.4	3.2	1.4	9.9
2017	54 (9)	1.9	3.2	1.0	4.9						23 (10)	1.7	2.8	1.4	8.8
2018	278 (64)	2.0	4.0	1.3	8.3						55 (37)	2.6	4.7	2.0	9.4
2019	123 (32)	2.2	4.6	1.8	8.6						50 (26)	2.0	5.3	2.2	10.7
2020	360 (81)	1.9	4.0	1.5	9.0						136 (71)	2.0	4.9	2.2	10.7
2021	413 (122)	1.1	3.9	2.0	11.0						47 (25)	1.0	3.3	1.3	7.5
2022	339 (101)	1.0	3.3	1.2	11.2						78 (50)	1.0	3.7	1.6	9.7
2023	520 (180)	1.4	3.5	1.3	11.0						53 (37)	1.9	3.7	1.4	7.2
2024	483 (182)	0.8	3.2	1.1	9.7						57 (40)	1.5	3.5	1.3	7.2

Table 7.3. Summary of weight measurements (pounds whole weight) from MRIP-intercepted Gray Triggerfish by mode and year for **Gulf of America** (Texas to western Florida). Summaries include the number of fish weighed by MRIP and, in parentheses, the number of angler trips from which those fish were weighed (N), and the minimum (Min), arithmetic mean (Avg), standard deviation (SD), and maximum (Max) size of fish weights. Summaries include observed and imputed weights.

Year	Cbt					Hbt					Priv				
	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max
1981	75 (19)	0.7	1.9	2.1	11.7	35 (25)	0.7	1.7	0.9	3.9	60 (18)	0.7	2.5	1.8	8.4
1982	100 (23)	0.5	2.6	1.6	7.3	123 (40)	0.7	1.9	0.9	8.5	41 (17)	0.4	2.6	1.5	6.0
1983	97 (26)	0.4	3.4	3.0	11.3	97 (52)	0.9	2.4	1.5	8.3	9 (7)	1.1	2.4	2.3	8.4
1984	106 (32)	1.3	4.2	2.2	9.6	26 (19)	0.7	2.2	2.3	9.3	2 (2)	6.9	7.0	0.1	7.1
1985	34 (7)	0.9	5.4	3.2	9.3	35 (28)	0.9	3.3	2.0	7.3	13 (5)	0.2	1.4	0.5	2.2
1986	829 (248)	0.7	2.6	1.6	13.0						53 (22)	0.7	2.2	1.3	5.7
1987	534 (116)	0.4	2.8	1.7	12.2						151 (47)	0.4	2.5	1.6	8.0
1988	69 (18)	0.9	3.0	1.9	11.1						25 (12)	0.4	1.4	0.7	2.3
1989	544 (109)	0.7	2.5	1.4	14.0						244 (82)	0.4	1.3	0.5	2.9
1990	581 (86)	0.9	3.1	2.0	11.4						174 (44)	0.7	1.9	0.9	5.1
1991	1,211 (182)	0.4	3.2	1.8	13.2						48 (21)	0.5	2.1	1.5	5.8
1992	1,696 (211)	0.3	3.3	2.0	14.0						350 (114)	0.4	2.0	1.3	9.4
1993	754 (155)	0.8	3.1	2.0	13.9						142 (60)	0.7	2.2	1.5	8.7
1994	792 (175)	0.7	2.3	1.4	11.9						126 (58)	0.5	2.2	1.6	9.3
1995	535 (93)	0.6	2.1	1.2	9.1						132 (44)	0.4	2.0	1.0	6.8
1996	426 (96)	0.7	2.3	1.4	8.8						120 (51)	0.4	1.7	0.9	6.8
1997	857 (192)	0.9	4.3	2.6	14.0						121 (63)	0.6	2.1	1.3	7.4
1998	1,678 (296)	0.8	2.8	1.6	12.6						220 (77)	0.8	2.1	1.2	7.0
1999	2,449 (498)	0.5	2.7	1.9	13.7						230 (102)	0.7	2.3	1.2	8.0
2000	2,417 (499)	0.4	2.8	1.9	13.5						153 (51)	0.7	3.2	1.7	10.3
2001	3,082 (433)	0.5	2.1	1.4	12.2						139 (75)	0.9	2.1	1.1	6.0
2002	2,897 (472)	0.5	2.6	1.8	13.9						261 (104)	0.8	2.1	1.3	7.2

Year	Cbt					Hbt					Priv				
	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max
2003	2,773 (451)	0.4	2.5	1.6	13.5						194 (75)	0.8	2.1	1.3	9.1
2004	3,577 (668)	0.4	1.8	0.9	8.0						322 (101)	0.7	1.8	0.7	5.6
2005	2,706 (496)	0.6	1.7	0.9	8.5						171 (79)	0.9	1.9	0.9	7.7
2006	1,413 (350)	0.5	1.9	1.0	7.2						136 (59)	0.7	1.7	0.6	5.0
2007	1,070 (316)	0.5	2.2	1.1	9.0						144 (77)	0.8	1.8	0.8	5.0
2008	901 (238)	0.8	2.2	1.0	8.6						98 (52)	1.1	2.0	0.7	4.0
2009	509 (169)	0.6	2.7	1.2	8.8						63 (34)	1.0	2.8	1.5	7.1
2010	554 (170)	1.3	2.8	1.1	9.4						94 (41)	1.4	3.0	1.0	7.2
2011	1,290 (328)	1.0	2.7	1.0	8.8						122 (62)	1.5	2.9	1.0	5.3
2012	366 (110)	1.0	3.1	1.1	8.1						101 (50)	1.4	3.1	1.4	8.0
2013	221 (70)	1.2	3.2	1.5	8.6						115 (54)	1.5	3.6	1.8	8.6
2014	143 (41)	0.8	3.1	1.5	8.9						81 (44)	1.3	3.3	1.9	10.6
2015	15 (5)	1.2	2.3	0.5	2.8						45 (17)	1.1	2.7	1.1	5.7
2016	307 (72)	1.2	3.3	1.2	7.6						157 (59)	1.4	3.2	1.4	9.9
2017	54 (9)	1.9	3.2	1.0	4.9						23 (10)	1.7	2.8	1.4	8.8
2018	278 (64)	2.0	4.0	1.3	8.3						55 (37)	2.6	4.7	2.0	9.4
2019	123 (32)	2.2	4.6	1.8	8.6						50 (26)	2.0	5.3	2.2	10.7
2020	360 (81)	1.9	4.0	1.5	9.0						136 (71)	2.0	4.9	2.2	10.7
2021	413 (122)	1.1	3.9	2.0	11.0						47 (25)	1.0	3.3	1.3	7.5
2022	339 (101)	1.0	3.3	1.2	11.2						78 (50)	1.0	3.7	1.6	9.7
2023	520 (180)	1.4	3.5	1.3	11.0						53 (37)	1.9	3.7	1.4	7.2
2024	483 (182)	0.8	3.2	1.1	9.7						57 (40)	1.5	3.5	1.3	7.2

Table 8. Summary of weight measurements (pounds whole weight) from MRIP-intercepted Gray Triggerfish by year for **Gulf of America** (Texas to western Florida). Summaries include the number of fish for which size information was collected by MRIP and, in parentheses, the number of angler trips from which those fish were sampled (N), and the minimum (Min), arithmetic mean (Avg), standard deviation (SD), and maximum (Max) size of fish weights.

Year	N	Weight			
		Min	Avg	SD	Max
1981	170 (62)	0.7	2.0	1.9	11.7
1982	264 (80)	0.4	2.3	1.3	8.5
1983	203 (85)	0.4	2.9	2.4	11.3
1984	134 (53)	0.7	3.9	2.3	9.6
1985	82 (40)	0.2	3.9	2.8	9.3
1986	882 (270)	0.7	2.5	1.5	13.0
1987	685 (163)	0.4	2.7	1.7	12.2
1988	94 (30)	0.4	2.6	1.8	11.1
1989	788 (191)	0.4	2.2	1.4	14.0
1990	755 (130)	0.7	2.8	1.8	11.4
1991	1,259 (203)	0.4	3.2	1.8	13.2
1992	2,046 (325)	0.3	3.0	2.0	14.0
1993	896 (215)	0.7	3.0	2.0	13.9
1994	918 (233)	0.5	2.3	1.4	11.9
1995	667 (137)	0.4	2.1	1.1	9.1
1996	546 (147)	0.4	2.2	1.3	8.8
1997	978 (255)	0.6	4.0	2.5	14.0
1998	1,898 (373)	0.8	2.7	1.6	12.6
1999	2,679 (600)	0.5	2.7	1.8	13.7
2000	2,570 (550)	0.4	2.8	1.9	13.5
2001	3,221 (508)	0.5	2.1	1.4	12.2
2002	3,158 (576)	0.5	2.5	1.8	13.9
2003	2,967 (526)	0.4	2.5	1.6	13.5
2004	3,899 (769)	0.4	1.8	0.9	8.0
2005	2,877 (575)	0.6	1.7	0.9	8.5
2006	1,549 (409)	0.5	1.8	1.0	7.2
2007	1,214 (393)	0.5	2.1	1.1	9.0
2008	999 (290)	0.8	2.2	1.0	8.6
2009	572 (203)	0.6	2.7	1.3	8.8
2010	648 (211)	1.3	2.9	1.1	9.4
2011	1,412 (390)	1.0	2.7	1.0	8.8
2012	467 (160)	1.0	3.1	1.2	8.1

Year	N	Weight			Max
		Min	Avg	SD	
2013	336 (124)	1.2	3.3	1.6	8.6
2014	224 (85)	0.8	3.2	1.7	10.6
2015	60 (22)	1.1	2.6	1.0	5.7
2016	464 (131)	1.2	3.3	1.3	9.9
2017	77 (19)	1.7	3.1	1.2	8.8
2018	333 (101)	2.0	4.1	1.4	9.4
2019	173 (58)	2.0	4.8	2.0	10.7
2020	496 (152)	1.9	4.3	1.8	10.7
2021	460 (147)	1.0	3.9	2.0	11.0
2022	417 (151)	1.0	3.4	1.3	11.2
2023	573 (217)	1.4	3.5	1.3	11.0
2024	540 (222)	0.8	3.2	1.1	9.7

Table 9. Summary of weight measurements (pounds whole weight) from Gray Triggerfish intercepted by the LA BIO and LA Creel sampling programs by mode and year. Summaries include the number of fish weighed by LDWF and, in parentheses, the number of angler trips from which those fish were weighed (N), and the minimum (Min), arithmetic mean (Avg), standard deviation (SD), and maximum (Max) size of fish weights.

Year	Cbt					Priv					Total				
	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max	N	Min	Avg	SD	Max
2014	1 (1)	3.6	3.6	0.0	3.6	32 (4)	1.2	2.1	0.7	3.6	33 (5)	1.2	2.1	0.8	3.6
2015	2 (2)	3.2	4.5	1.9	5.8	5 (4)	1.5	3.6	1.2	4.3	7 (6)	1.5	3.8	1.3	5.8
2016	0 (0)	0.0	0.0	0.0	0.0	5 (4)	1.9	2.6	0.7	3.8	5 (4)	1.9	2.6	0.7	3.8
2017	0 (0)	0.0	0.0	0.0	0.0	0 (0)	0.0	0.0	0.0	0.0	0 (0)	0.0	0.0	0.0	0.0
2018	0 (0)	0.0	0.0	0.0	0.0	2 (2)	4.9	5.1	0.3	5.3	2 (2)	4.9	5.1	0.3	5.3
2019	0 (0)	0.0	0.0	0.0	0.0	0 (0)	0.0	0.0	0.0	0.0	0 (0)	0.0	0.0	0.0	0.0
2020	0 (0)	0.0	0.0	0.0	0.0	2 (1)	2.8	2.9	0.2	3.0	2 (1)	2.8	2.9	0.2	3.0
2021	0 (0)	0.0	0.0	0.0	0.0	1 (1)	2.9	2.9	0.0	2.9	1 (1)	2.9	2.9	0.0	2.9
2022	0 (0)	0.0	0.0	0.0	0.0	9 (4)	2.2	3.3	0.8	5.1	9 (4)	2.2	3.3	0.8	5.1
2023	1 (1)	2.9	2.9	0.0	2.9	3 (2)	2.4	3.4	0.8	4.0	4 (3)	2.4	3.3	0.7	4.0
2024	8 (5)	2.2	3.1	1.3	6.0	0 (0)	0.0	0.0	0.0	0.0	8 (5)	2.2	3.1	1.3	6.0

Table 10.1. Estimated average weights of landed Gray Triggerfish in pounds whole weight (WGT) with associated coefficients of variation (CV; Approach 2 described in Nuttall and Dettloff 2022) by year and mode from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana). Average weight estimates are calculated from annual estimates (by-mode) of landings-in-weight (whole, Table 6.1) divided by estimates of landings-in-number (Table 2.1). Sample size (N) is provided as the total number of angler trips and, in parentheses, number of fish from which weight information was collected (MRIP, LABIO 2014+, TPWD).

Year	WGT	Hbt CV	N	WGT	Cbt CV	N	WGT	Priv CV	N	WGT	Total CV	N
1981				1.97	0.38	6 (10)	1.76	0.00	1 (6)	1.81	0.30	7 (16)
1982	1.24	0.03	7 (21)							1.15	0.03	7 (21)
1983				5.23	0.07	9 (38)				5.08	0.07	9 (38)
1984				4.63	0.08	25 (81)	2.92	0.00	1 (1)	4.02	0.07	26 (82)
1985				7.47	0.10	3 (20)				6.35	0.10	3 (20)
1986				3.51	0.16	13 (36)	1.35	0.18	6 (26)	1.46	0.16	19 (62)
1987				3.32	0.11	11 (32)	1.44	0.00	1 (2)	1.58	0.11	12 (34)
1988				1.61	0.00	1 (4)				1.10	0.00	1 (4)
1989							1.76	0.04	5 (16)	1.76	0.04	5 (16)
1990				2.74	0.00	2 (10)	2.22	0.12	9 (41)	2.23	0.10	11 (51)
1991				2.73	0.09	30 (227)	1.16	0.00	1 (2)	2.26	0.09	31 (229)
1992				2.53	0.16	25 (144)	1.52	0.05	12 (31)	1.74	0.14	37 (175)
1993				2.52	0.18	15 (58)	1.41	0.00	2 (2)	1.57	0.17	17 (60)
1994				2.18	0.11	15 (61)	2.04	0.00	4 (16)	2.07	0.09	19 (77)
1995				2.51	0.11	11 (55)	1.69	0.12	6 (26)	1.76	0.11	17 (81)
1996				4.28	0.09	7 (21)	1.57	0.02	3 (5)	1.69	0.09	10 (26)
1997				2.25	0.08	4 (14)	1.67	0.10	10 (20)	1.71	0.09	14 (34)
1998				3.04	0.27	11 (41)	1.35	0.00	1 (5)	1.69	0.26	12 (46)
1999				2.25	0.00	1 (1)	2.90	0.20	18 (56)	2.89	0.18	19 (57)
2000				4.13	0.18	6 (18)	2.40	0.12	13 (55)	2.42	0.16	19 (73)
2001				1.73	0.09	5 (9)	1.93	0.19	5 (9)	1.93	0.14	10 (18)

Year	Hbt			Cbt			Priv			Total		
	WGT	CV	N	WGT	CV	N	WGT	CV	N	WGT	CV	N
2002				2.85	0.13	17 (52)	2.03	0.00	3 (5)	2.14	0.12	20 (57)
2003				2.44	0.09	24 (66)	1.86	0.00	3 (11)	1.95	0.09	27 (77)
2004				2.10	0.10	23 (52)	1.72	0.08	9 (28)	1.76	0.10	32 (80)
2005				3.23	0.08	7 (15)	1.51	0.09	3 (6)	1.64	0.09	10 (21)
2006				2.48	0.24	13 (26)	1.47	0.25	11 (33)	1.50	0.24	24 (59)
2007				1.88	0.12	20 (50)	1.56	0.14	6 (8)	1.60	0.12	26 (58)
2008				2.69	0.04	6 (77)	1.83	0.12	7 (12)	2.01	0.08	13 (89)
2009				2.07	0.00	1 (1)	1.56	0.23	2 (5)	1.57	0.21	3 (6)
2010												
2011				2.61	0.06	3 (12)				1.35	0.06	3 (12)
2012							2.23	0.12	4 (10)	2.23	0.12	4 (10)
2013							2.13	0.06	3 (11)	2.13	0.06	3 (11)
2014				2.13	0.00	1 (1)	1.96	0.00	4 (32)	1.96	0.00	5 (33)
2015				1.83	0.29	2 (2)	1.97	0.23	4 (5)	1.97	0.26	6 (7)
2016							3.21	0.17	4 (5)	3.21	0.17	4 (5)
2017												
2018							4.07	0.00	2 (2)	4.07	0.00	2 (2)
2019												
2020							2.76	0.00	1 (2)	2.77	0.00	1 (2)
2021							3.81	0.00	1 (1)	3.81	0.00	1 (1)
2022							3.35	0.13	4 (9)	3.35	0.13	4 (9)
2023				3.05	0.00	1 (1)	2.53	0.00	2 (3)	2.55	0.00	3 (4)
2024				3.19	0.34	5 (8)				3.19	0.34	5 (8)

Table 10.2. Estimated average weights of landed Gray Triggerfish in pounds whole weight (WGT) with associated coefficients of variation (CV; Approach 2 described in Nuttall and Dettloff 2022) by year and mode from all data sources (MRIP) for the **East** domain (Mississippi through western Florida). Average weight estimates are calculated from annual estimates (by-mode) of landings-in-weight (whole, Table 6.2) divided by estimates of landings-in-number (Table 2.2). Sample size (N) is provided as the total number of angler trips and, in parentheses, number of fish from which weight information was collected (MRIP, LABIO 2014+, TPWD).

Year	Hbt			Cbt			Priv			Total		
	WGT	CV	N	WGT	CV	N	WGT	CV	N	WGT	CV	N
1981	1.61	0.16	25 (35)	1.62	0.54	13 (65)	2.38	0.16	17 (54)	2.20	0.34	55 (154)
1982	2.09	0.02	33 (102)	3.09	0.17	23 (100)	2.62	0.38	17 (41)	2.70	0.21	73 (243)
1983	2.60	0.15	52 (97)	1.88	0.06	17 (59)	2.47	0.05	7 (9)	2.33	0.13	76 (165)
1984	2.06	0.08	19 (26)	2.60	0.21	7 (25)	3.07	0.00	1 (1)	2.42	0.12	27 (52)
1985	3.35	0.15	28 (35)	2.72	0.14	4 (14)	2.72	0.00	5 (13)	2.80	0.16	37 (62)
1986				2.43	0.14	235 (793)	2.70	0.20	16 (27)	2.46	0.14	251 (820)
1987				2.74	0.20	105 (502)	2.81	0.21	46 (149)	2.78	0.20	151 (651)
1988				3.04	0.16	17 (65)	1.33	0.21	12 (25)	1.88	0.18	29 (90)
1989				2.36	0.11	109 (544)	1.29	0.17	77 (228)	1.63	0.12	186 (772)
1990				3.46	0.16	84 (571)	1.73	0.17	35 (133)	2.80	0.16	119 (704)
1991				2.57	0.10	152 (984)	2.38	0.27	20 (46)	2.55	0.12	172 (1,030)
1992				2.91	0.08	186 (1,552)	2.01	0.20	102 (319)	2.44	0.11	288 (1,871)
1993				2.80	0.12	140 (696)	2.29	0.19	58 (140)	2.54	0.14	198 (836)
1994				2.19	0.15	160 (731)	2.34	0.39	54 (110)	2.25	0.23	214 (841)
1995				1.85	0.13	82 (480)	1.96	0.12	38 (106)	1.88	0.13	120 (586)
1996				2.17	0.17	89 (405)	1.69	0.28	48 (115)	1.90	0.21	137 (520)
1997				4.08	0.12	188 (843)	1.94	0.22	53 (101)	2.92	0.13	241 (944)
1998				2.70	0.12	285 (1,637)	1.98	0.17	76 (215)	2.16	0.13	361 (1,852)
1999				2.64	0.07	497 (2,448)	2.01	0.15	84 (174)	2.24	0.08	581 (2,622)
2000				2.85	0.07	493 (2,399)	2.36	0.12	38 (98)	2.51	0.08	531 (2,497)
2001				2.30	0.08	428 (3,073)	1.77	0.13	70 (130)	1.95	0.09	498 (3,203)
2002				2.74	0.08	455 (2,845)	2.19	0.21	101 (256)	2.28	0.10	556 (3,101)

Year	Hbt			Cbt			Priv			Total		
	WGT	CV	N	WGT	CV	N	WGT	CV	N	WGT	CV	N
2003				2.85	0.08	427 (2,707)	1.88	0.37	72 (183)	2.00	0.16	499 (2,890)
2004				1.85	0.07	645 (3,525)	1.80	0.12	92 (294)	1.81	0.08	737 (3,819)
2005				1.85	0.07	489 (2,691)	1.85	0.20	76 (165)	1.85	0.10	565 (2,856)
2006				2.01	0.08	337 (1,387)	1.56	0.08	48 (103)	1.66	0.08	385 (1,490)
2007				2.19	0.11	296 (1,020)	1.70	0.15	71 (136)	1.80	0.12	367 (1,156)
2008				2.18	0.11	232 (824)	1.96	0.11	45 (86)	2.01	0.11	277 (910)
2009				2.71	0.10	168 (508)	2.98	0.19	32 (58)	2.91	0.12	200 (566)
2010				2.86	0.09	170 (554)	3.08	0.14	41 (94)	3.06	0.10	211 (648)
2011				2.78	0.06	325 (1,278)	2.82	0.10	62 (122)	2.81	0.07	387 (1,400)
2012				3.07	0.07	110 (366)	3.21	0.15	46 (91)	3.20	0.10	156 (457)
2013				3.25	0.13	70 (221)	3.91	0.15	51 (104)	3.84	0.14	121 (325)
2014				3.10	0.14	41 (143)	3.13	0.14	44 (81)	3.12	0.14	85 (224)
2015				2.70	0.16	5 (15)	2.28	0.13	17 (45)	2.28	0.13	22 (60)
2016				3.22	0.08	72 (307)	3.30	0.14	59 (157)	3.28	0.11	131 (464)
2017				3.18	0.09	9 (54)	2.45	0.02	10 (23)	2.53	0.06	19 (77)
2018				3.89	0.09	64 (278)	4.65	0.16	37 (55)	4.46	0.12	101 (333)
2019				4.60	0.09	32 (123)	5.68	0.14	26 (50)	5.34	0.12	58 (173)
2020				3.81	0.08	81 (360)	5.01	0.12	71 (136)	4.80	0.11	152 (496)
2021				4.45	0.11	122 (413)	3.57	0.11	25 (47)	3.95	0.11	147 (460)
2022				3.12	0.08	101 (339)	3.76	0.18	50 (78)	3.60	0.13	151 (417)
2023				3.41	0.08	180 (520)	3.71	0.14	37 (53)	3.61	0.09	217 (573)
2024				3.00	0.06	182 (483)	3.66	0.15	40 (57)	3.54	0.09	222 (540)

Table 10.3. Estimated average weights of landed Gray Triggerfish in pounds whole weight (WGT) with associated coefficients of variation (CV; Approach 2 described in Nuttall and Dettloff 2022) by year and mode from all data sources (MRIP, LACreel 2014+, TPWD) for **Gulf of America** (Texas to western Florida). Average weight estimates are calculated from annual estimates (by-mode) of landings-in-weight (whole, Table 6.3) divided by estimates of landings-in-number (Table 2.3). Sample size (N) is provided as the total number of angler trips and, in parentheses, number of fish from which weight information was collected (MRIP, LABIO 2014+, TPWD).

Year	Hbt			Cbt			Priv			Total		
	WGT	CV	N	WGT	CV	N	WGT	CV	N	WGT	CV	N
1981	1.62	0.16	25 (35)	1.67	0.54	19 (75)	2.31	0.15	18 (60)	2.16	0.34	62 (170)
1982	2.09	0.02	40 (123)	3.00	0.17	23 (100)	2.48	0.38	17 (41)	2.64	0.21	80 (264)
1983	2.66	0.15	52 (97)	2.37	0.07	26 (97)	4.30	0.05	7 (9)	3.90	0.12	85 (203)
1984	2.18	0.08	19 (26)	3.10	0.10	32 (106)	2.96	0.00	2 (2)	2.82	0.09	53 (134)
1985	3.73	0.15	28 (35)	4.73	0.12	7 (34)	2.61	0.00	5 (13)	3.40	0.15	40 (82)
1986				2.43	0.14	248 (829)	2.24	0.20	22 (53)	2.40	0.14	270 (882)
1987				2.74	0.19	116 (534)	2.76	0.21	47 (151)	2.75	0.19	163 (685)
1988				3.01	0.16	18 (69)	1.30	0.21	12 (25)	1.83	0.18	30 (94)
1989				2.36	0.11	109 (544)	1.35	0.16	82 (244)	1.64	0.12	191 (788)
1990				3.46	0.15	86 (581)	1.86	0.16	44 (174)	2.72	0.16	130 (755)
1991				2.58	0.10	182 (1,211)	2.16	0.25	21 (48)	2.53	0.12	203 (1,259)
1992				2.90	0.09	211 (1,696)	1.94	0.18	114 (350)	2.38	0.12	325 (2,046)
1993				2.80	0.13	155 (754)	2.21	0.19	60 (142)	2.48	0.14	215 (896)
1994				2.19	0.15	175 (792)	2.26	0.36	58 (126)	2.22	0.22	233 (918)
1995				1.87	0.13	93 (535)	1.83	0.12	44 (132)	1.85	0.13	137 (667)
1996				2.20	0.16	96 (426)	1.66	0.27	51 (120)	1.87	0.19	147 (546)
1997				4.03	0.12	192 (857)	1.87	0.21	63 (121)	2.70	0.13	255 (978)
1998				2.74	0.13	296 (1,678)	1.89	0.17	77 (220)	2.10	0.14	373 (1,898)
1999				2.64	0.07	498 (2,449)	2.26	0.17	102 (230)	2.37	0.09	600 (2,679)
2000				2.87	0.08	499 (2,417)	2.38	0.12	51 (153)	2.47	0.08	550 (2,570)
2001				2.29	0.08	433 (3,082)	1.79	0.14	75 (139)	1.94	0.09	508 (3,221)

Year	Hbt			Cbt			Priv			Total		
	WGT	CV	N	WGT	CV	N	WGT	CV	N	WGT	CV	N
2002				2.74	0.08	472 (2,897)	2.19	0.21	104 (261)	2.27	0.10	576 (3,158)
2003				2.84	0.08	451 (2,773)	1.88	0.37	75 (194)	2.00	0.15	526 (2,967)
2004				1.86	0.07	668 (3,577)	1.79	0.12	101 (322)	1.81	0.08	769 (3,899)
2005				1.89	0.07	496 (2,706)	1.82	0.19	79 (171)	1.83	0.10	575 (2,877)
2006				2.02	0.10	350 (1,413)	1.54	0.14	59 (136)	1.64	0.10	409 (1,549)
2007				2.17	0.11	316 (1,070)	1.69	0.15	77 (144)	1.78	0.12	393 (1,214)
2008				2.29	0.11	238 (901)	1.94	0.12	52 (98)	2.01	0.11	290 (999)
2009				2.71	0.10	169 (509)	2.77	0.19	34 (63)	2.75	0.12	203 (572)
2010				2.86	0.09	170 (554)	3.08	0.14	41 (94)	3.06	0.10	211 (648)
2011				2.78	0.06	328 (1,290)	2.78	0.10	62 (122)	2.78	0.07	390 (1,412)
2012				3.07	0.07	110 (366)	3.08	0.14	50 (101)	3.08	0.10	160 (467)
2013				3.25	0.13	70 (221)	3.81	0.15	54 (115)	3.76	0.14	124 (336)
2014				3.10	0.14	42 (144)	2.92	0.14	48 (113)	2.94	0.14	90 (257)
2015				2.30	0.27	7 (17)	2.16	0.17	21 (50)	2.17	0.20	28 (67)
2016				3.22	0.08	72 (307)	3.29	0.14	63 (162)	3.28	0.11	135 (469)
2017				3.18	0.09	9 (54)	2.46	0.02	10 (23)	2.54	0.06	19 (77)
2018				3.89	0.09	64 (278)	4.59	0.15	39 (57)	4.43	0.12	103 (335)
2019				4.60	0.09	32 (123)	5.51	0.14	26 (50)	5.24	0.12	58 (173)
2020				3.81	0.08	81 (360)	4.97	0.12	72 (138)	4.77	0.11	153 (498)
2021				4.45	0.11	122 (413)	3.58	0.11	26 (48)	3.94	0.11	148 (461)
2022				3.12	0.08	101 (339)	3.76	0.18	54 (87)	3.60	0.13	155 (426)
2023				3.41	0.08	181 (521)	3.63	0.13	39 (56)	3.56	0.09	220 (577)
2024				3.00	0.08	187 (491)	3.65	0.15	40 (57)	3.54	0.10	227 (548)

Table 11.1. Recreational Fishing Effort (in angler trips) for Gulf of America anglers by mode and year from all data sources (MRIP, LACreel 2014+, TPWD) for the **West** domain (Texas through Louisiana). These effort estimates depict all (general) recreational fishing activity in the Gulf of America and are not specific to Gray Triggerfish. Effort from the combined private-shore fishing mode in the LA Creel survey has been added to the private mode.

Year	Cbt	Hbt	Priv	Total
1981	112,608	7,244	10,378,548	10,498,400
1982	108,239	6,887	10,541,310	10,656,436
1983	125,356	8,014	10,728,331	10,861,700
1984	119,360	8,419	9,932,536	10,060,315
1985	124,223	8,093	11,053,240	11,185,556
1986	95,949		10,669,817	10,765,766
1987	117,907		12,707,090	12,824,997
1988	125,860		12,142,861	12,268,721
1989	153,414		11,255,386	11,408,800
1990	138,019		11,495,260	11,633,279
1991	159,484		11,359,400	11,518,884
1992	156,120		12,779,200	12,935,320
1993	167,343		12,941,923	13,109,266
1994	204,199		13,695,849	13,900,048
1995	189,196		13,896,433	14,085,629
1996	189,925		14,338,643	14,528,568
1997	210,156		12,812,819	13,022,975
1998	225,179		13,348,752	13,573,931
1999	231,097		15,634,350	15,865,447
2000	247,426		15,585,234	15,832,660
2001	267,924		14,348,287	14,616,211
2002	232,849		13,685,303	13,918,152
2003	246,990		14,539,211	14,786,201
2004	260,405		14,151,982	14,412,387
2005	228,535		13,166,925	13,395,460
2006	330,102		13,570,306	13,900,408
2007	290,761		13,034,482	13,325,243
2008	296,541		13,159,759	13,456,300
2009	285,253		14,288,807	14,574,060
2010	198,615		14,418,734	14,617,349
2011	257,995		14,802,529	15,060,524
2012	329,426		14,541,340	14,870,766
2013	264,864		14,564,002	14,828,866

Year	Cbt	Hbt	Priv	Total
2014	269,225		19,005,823	19,275,048
2015	304,122		19,344,806	19,648,928
2016	336,690		19,802,894	20,139,584
2017	367,224		19,256,229	19,623,453
2018	482,197		18,266,302	18,748,499
2019	546,507		18,572,828	19,119,335
2020	352,799		21,665,769	22,018,568
2021	406,415		17,065,193	17,471,608
2022	480,646		15,810,228	16,290,874
2023	730,528		18,778,407	19,508,935
2024	357,596		15,410,751	15,768,347

Table 11.2. Recreational Fishing Effort (in angler trips) for Gulf of America anglers by mode and year from all data sources (MRIP) for the **East** domain (Mississippi through western Florida). These effort estimates depict all (general) recreational fishing activity in the Gulf of America and are not specific to Gray Triggerfish.

Year	Cbt	Hbt	Priv	Total
1981	267,915	150,094	8,280,495	8,698,504
1982	444,905	254,025	8,090,944	8,789,874
1983	454,582	248,479	10,153,634	10,856,695
1984	419,203	233,792	10,007,009	10,660,004
1985	466,187	269,423	10,960,333	11,695,943
1986	470,708		10,612,258	11,082,966
1987	466,074		10,507,714	10,973,788
1988	387,823		13,083,456	13,471,279
1989	442,500		12,458,646	12,901,146
1990	444,349		13,267,653	13,712,002
1991	378,034		12,895,061	13,273,095
1992	406,337		13,144,202	13,550,539
1993	464,208		13,450,255	13,914,463
1994	469,326		13,896,776	14,366,102
1995	578,013		14,459,222	15,037,235
1996	536,081		14,237,535	14,773,616
1997	559,554		15,577,602	16,137,156
1998	539,881		16,963,474	17,503,355
1999	548,109		18,605,938	19,154,047
2000	513,063		17,750,136	18,263,199
2001	495,864		20,283,870	20,779,734
2002	509,566		19,915,628	20,425,194
2003	452,730		20,621,441	21,074,171
2004	520,361		24,233,941	24,754,302
2005	457,220		23,811,752	24,268,972
2006	487,314		21,635,467	22,122,781
2007	570,961		21,763,298	22,334,259
2008	513,460		23,585,873	24,099,333
2009	488,992		22,321,654	22,810,646
2010	396,669		23,044,592	23,441,261
2011	498,696		23,560,707	24,059,403
2012	609,795		25,078,412	25,688,207
2013	609,907		23,245,819	23,855,726
2014	592,321		20,242,471	20,834,792

Year	Cbt	Hbt	Priv	Total
2015	687,136		18,925,709	19,612,845
2016	717,394		20,338,425	21,055,819
2017	719,153		21,236,945	21,956,098
2018	738,980		19,666,722	20,405,702
2019	746,964		17,175,116	17,922,080
2020	828,833		19,356,174	20,185,007
2021	942,495		18,336,229	19,278,724
2022	926,284		20,440,718	21,367,002
2023	912,866		19,751,275	20,664,141
2024	800,538		20,747,929	21,548,467

Table 11.3. Recreational Fishing Effort (in angler trips) for **Gulf of America** (Texas to western Florida) anglers by mode and year from all data sources (MRIP, LACreel 2014+, TPWD). These effort estimates depict all (general) recreational fishing activity in the Gulf of America and are not specific to Gray Triggerfish. Effort from the combined private-shore fishing mode in the LA Creel survey has been added to the private mode.

Year	Cbt	Hbt	Priv	Total
1981	380,523	157,337	18,659,043	19,196,903
1982	553,144	260,912	18,632,255	19,446,310
1983	579,938	256,493	20,881,964	21,718,395
1984	538,563	242,211	19,939,545	20,720,319
1985	590,410	277,516	22,013,573	22,881,499
1986	566,657		21,282,075	21,848,732
1987	583,981		23,214,805	23,798,786
1988	513,682		25,226,317	25,739,999
1989	595,914		23,714,032	24,309,946
1990	582,368		24,762,913	25,345,281
1991	537,518		24,254,461	24,791,979
1992	562,458		25,923,402	26,485,860
1993	631,551		26,392,178	27,023,729
1994	673,526		27,592,625	28,266,151
1995	767,210		28,355,654	29,122,864
1996	726,006		28,576,178	29,302,184
1997	769,710		28,390,421	29,160,131
1998	765,060		30,312,226	31,077,286
1999	779,206		34,240,288	35,019,494
2000	760,488		33,335,370	34,095,858
2001	763,788		34,632,157	35,395,945
2002	742,415		33,600,931	34,343,346
2003	699,720		35,160,652	35,860,372
2004	780,766		38,385,923	39,166,689
2005	685,755		36,978,677	37,664,432
2006	817,416		35,205,773	36,023,189
2007	861,722		34,797,780	35,659,502
2008	810,000		36,745,631	37,555,631
2009	774,246		36,610,461	37,384,707
2010	595,284		37,463,325	38,058,609
2011	756,691		38,363,236	39,119,927
2012	939,221		39,619,752	40,558,973
2013	874,771		37,809,821	38,684,592

Year	Cbt	Hbt	Priv	Total
2014	861,546		39,248,294	40,109,840
2015	991,258		38,270,515	39,261,773
2016	1,054,084		40,141,319	41,195,403
2017	1,086,377		40,493,173	41,579,550
2018	1,221,177		37,933,024	39,154,201
2019	1,293,471		35,747,943	37,041,414
2020	1,181,632		41,021,943	42,203,575
2021	1,348,910		35,401,422	36,750,332
2022	1,406,930		36,250,946	37,657,876
2023	1,643,394		38,529,682	40,173,076
2024	1,158,133		36,158,681	37,316,814

Table 12. Catch estimates for the Gulf of America Triggerfish Family (UNID CATCH) and estimates of the relative contribution of Gray Triggerfish to this catch (Ratio). Ratios are the average catch of Gray Triggerfish relative to all Triggerfish species (Gray Triggerfish, Triggerfish Family, Ocean Triggerfish, Queen Triggerfish) and are provided for individual years (1981-2024) and across all years (Grand Total).

Year	UNID CATCH		Ratio	
	AB1	B2	%AB1	%B2
1981	2,005	0	0.924	0.957
1982	0	5,246	0.971	0.942
1983	2,466	390,650	0.381	0.065
1984	0	0	0.381	0.485
1985	3,557	0	0.461	0.848
1986	3,328	20,103	0.974	1.000
1987	0	0	0.906	0.637
1988	0	0	0.923	0.814
1989	0	0	0.993	0.591
1990	0	0	1.000	0.958
1991	0	0	0.988	1.000
1992	0	0	1.000	0.943
1993	0	0	0.993	0.848
1994	0	0	0.980	0.936
1995	0	0	1.000	0.989
1996	0	0	1.000	0.853
1997	0	0	1.000	0.969
1998	0	0	0.997	0.956
1999	0	0	1.000	0.880
2000	0	0	1.000	1.000
2001	0	0	1.000	1.000
2002	0	0	0.999	0.998
2003	0	1,512	1.000	1.000
2004	0	0	1.000	1.000
2005	0	0	1.000	0.999
2006	0	0	1.000	1.000
2007	0	0	1.000	1.000
2008	0	0	1.000	1.000
2009	0	0	1.000	0.916
2010	0	0	1.000	0.993
2011	0	0	1.000	1.000
2012	0	0	1.000	0.997

Year	UNID CATCH		Ratio	
	AB1	B2	%AB1	%B2
2013	0	0	0.998	0.995
2014	0	0	1.000	1.000
2015	0	0	1.000	1.000
2016	0	0	0.989	0.995
2017	0	0	1.000	0.989
2018	0	0	1.000	1.000
2019	0	0	0.993	0.994
2020	0	0	0.975	0.996
2021	0	0	1.000	0.998
2022	0	0	1.000	0.986
2023	0	0	1.000	0.998
2024	0	0	0.999	1.000
Grand Total	11,356	417,511	0.950	0.961

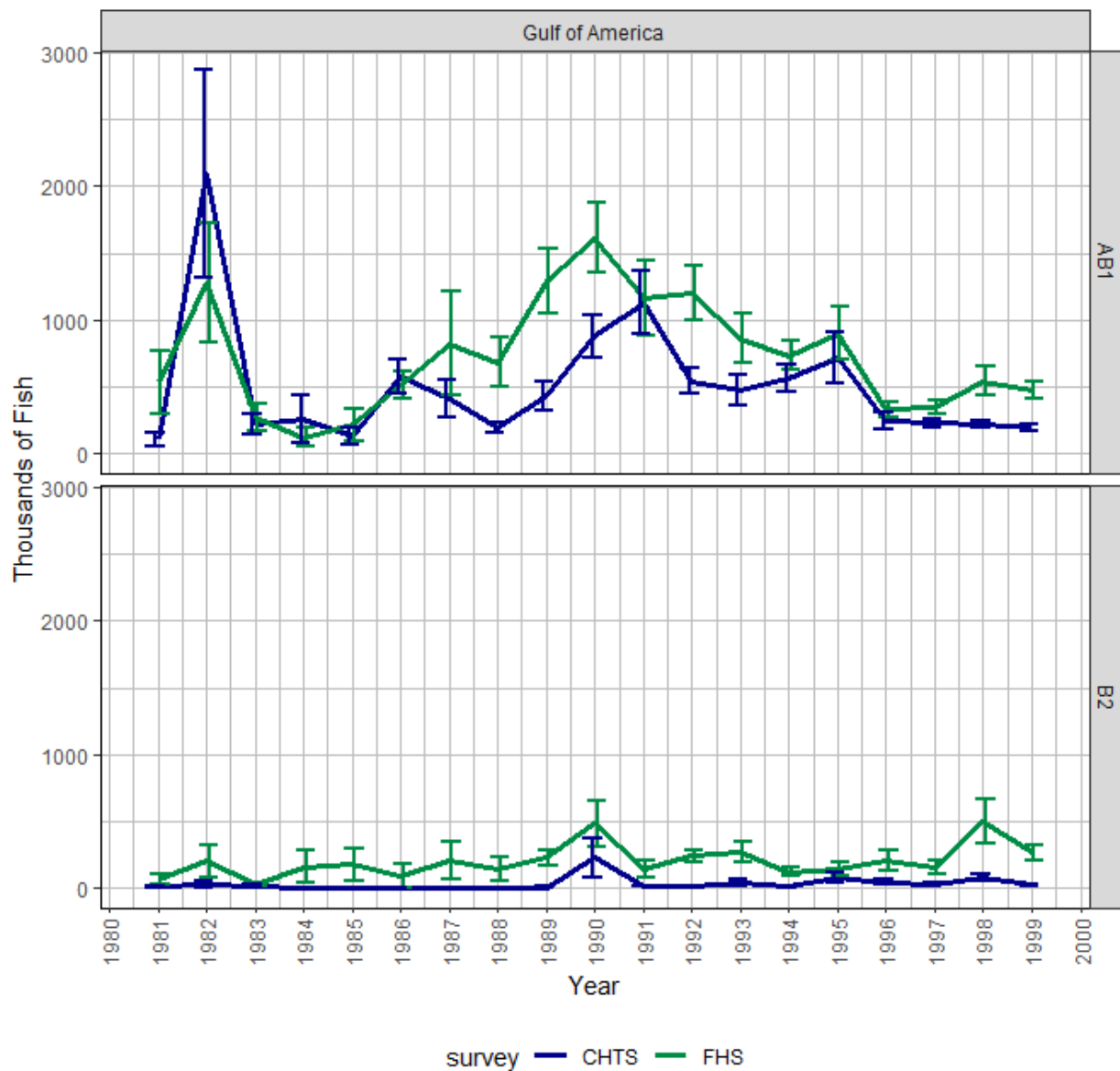


Figure 1. Comparison of MRIP charterboat landings (AB1) and discard (B2) estimates (with standard error intervals shown) for Gray Triggerfish from the Coastal Household Telephone Survey (CHTS) and For-Hire Survey (FHS) from the Gulf of America between 1981 and 1999. The Charterboat calibration approach is discussed in Dettloff and Matter (2019a).

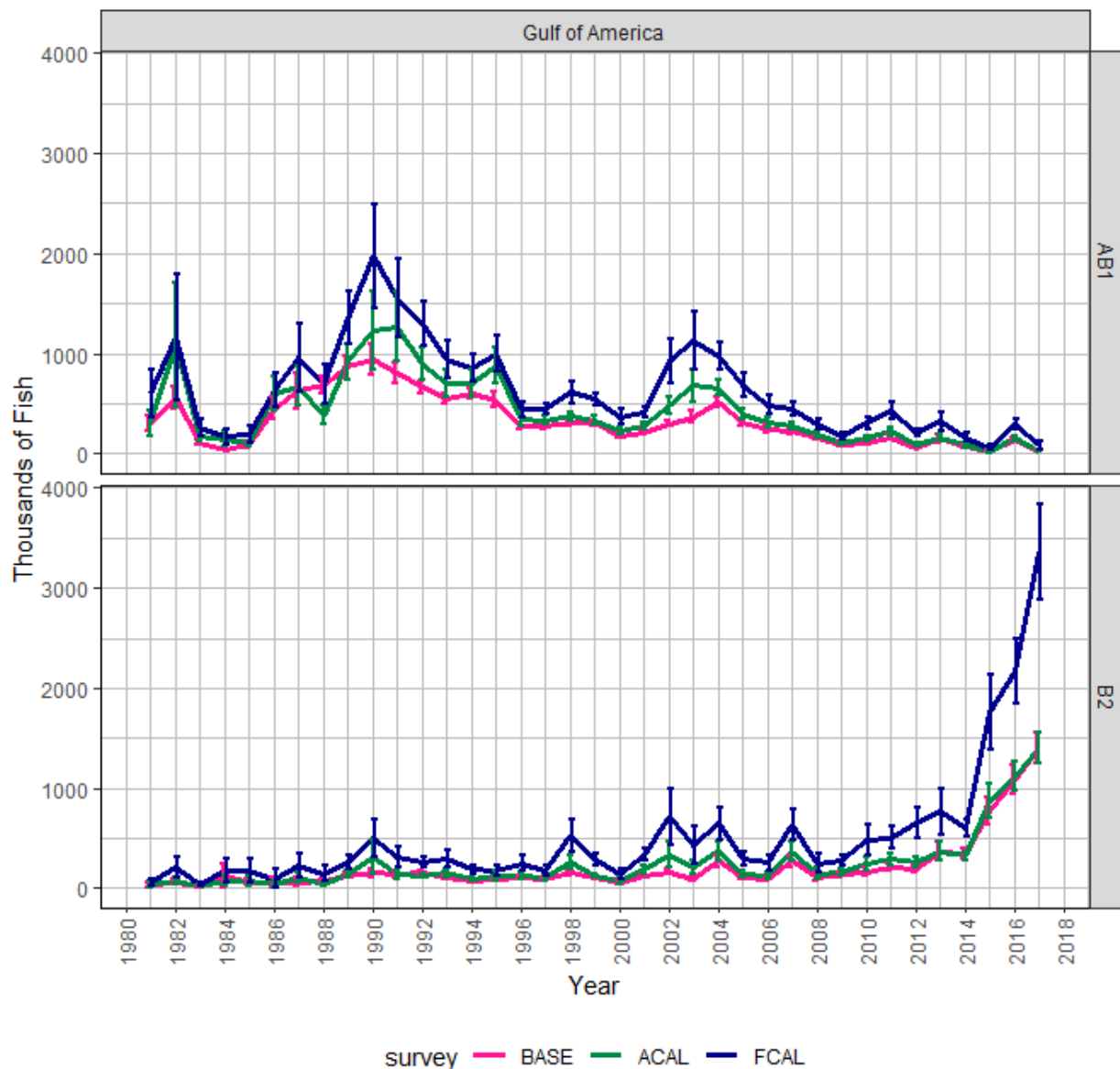


Figure 2. MRIP Base (BASE), APAIS Calibrated (ACAL), and Fully Calibrated APAIS and FES (FCAL) estimates for Gray Triggerfish in the Gulf of America between 1981 and 2017. Estimates in this figure include the Florida Keys as that domain is not separable from those used by the MRIP online comparison tool for the Gulf of America (NMFS pers comm). The Shore mode is also included as uncertainty estimates for catch across multiple modes are only available when all modes are selected.

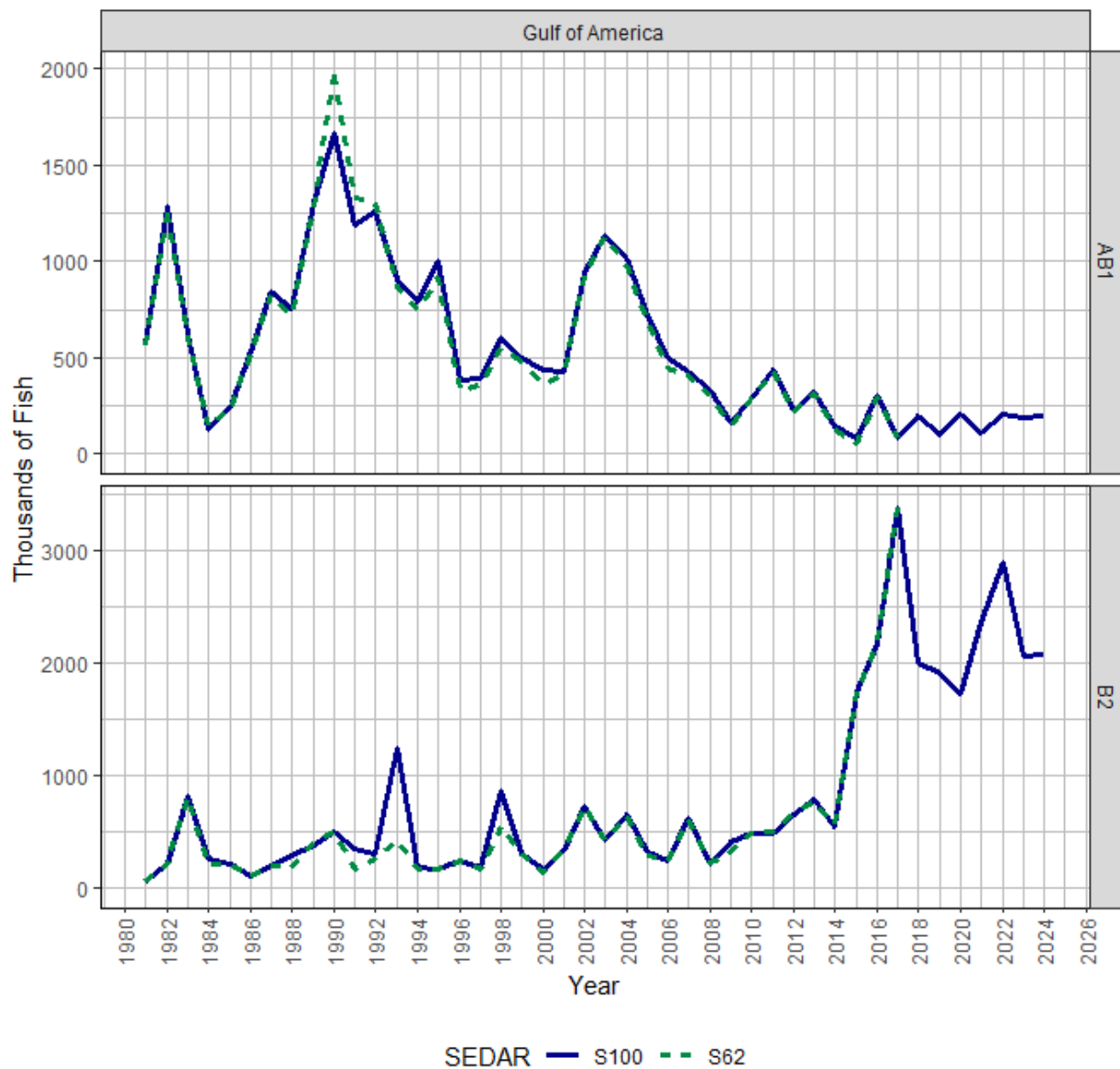


Figure 3. Comparison of total general recreational landings (AB1) and discard estimates (B2) for Gulf of America Gray Triggerfish between SEDAR 100 and SEDAR 62, the terminal years of which are 2024 and 2017 respectively.

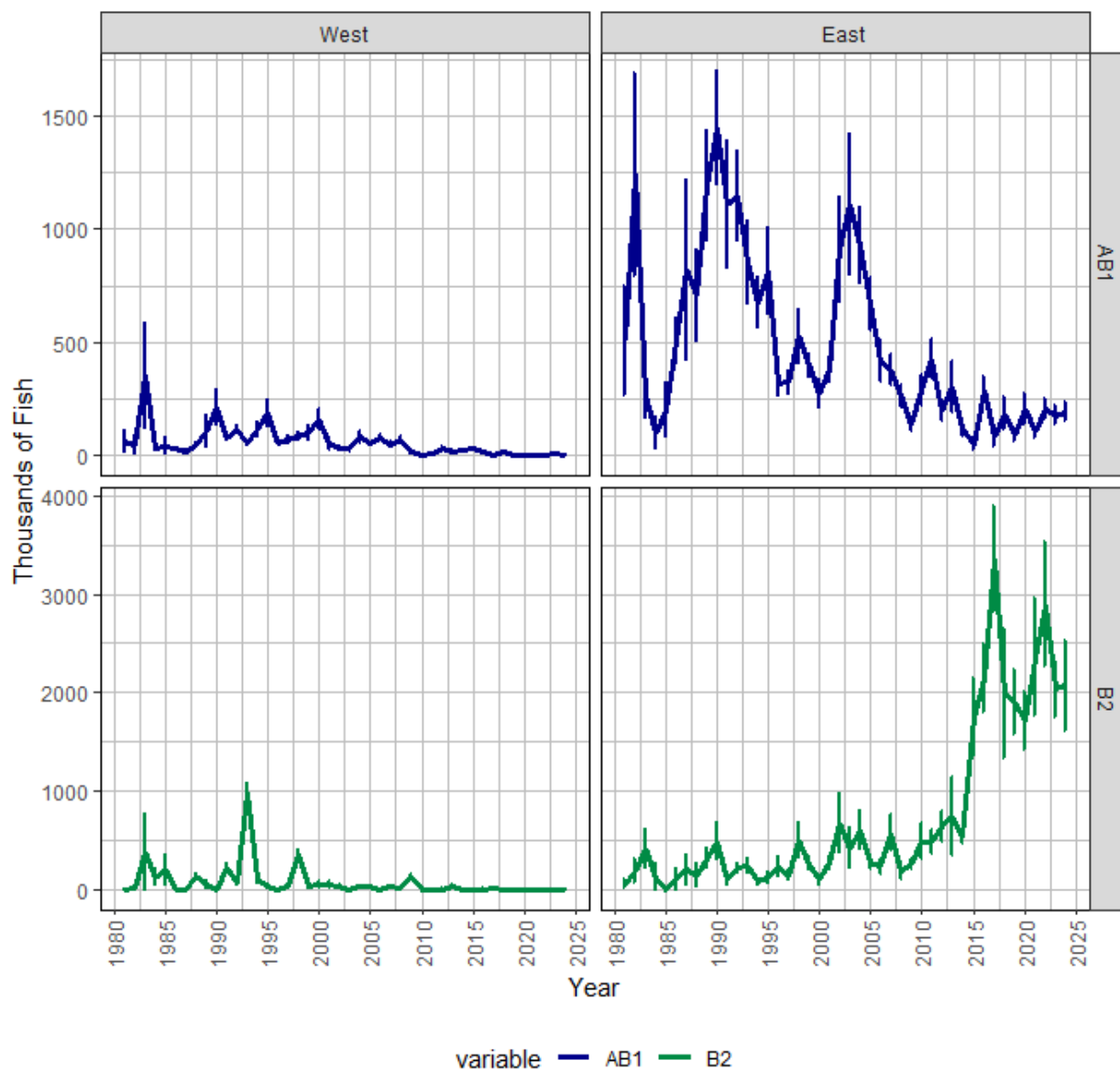


Figure 4.1. Annual landings (AB1) and discard (B2) estimates with standard error intervals, in thousands of fish, for **West** (Texas and Louisiana) and **East** (Mississippi to western Florida) Gray Triggerfish between 1981 to 2024.

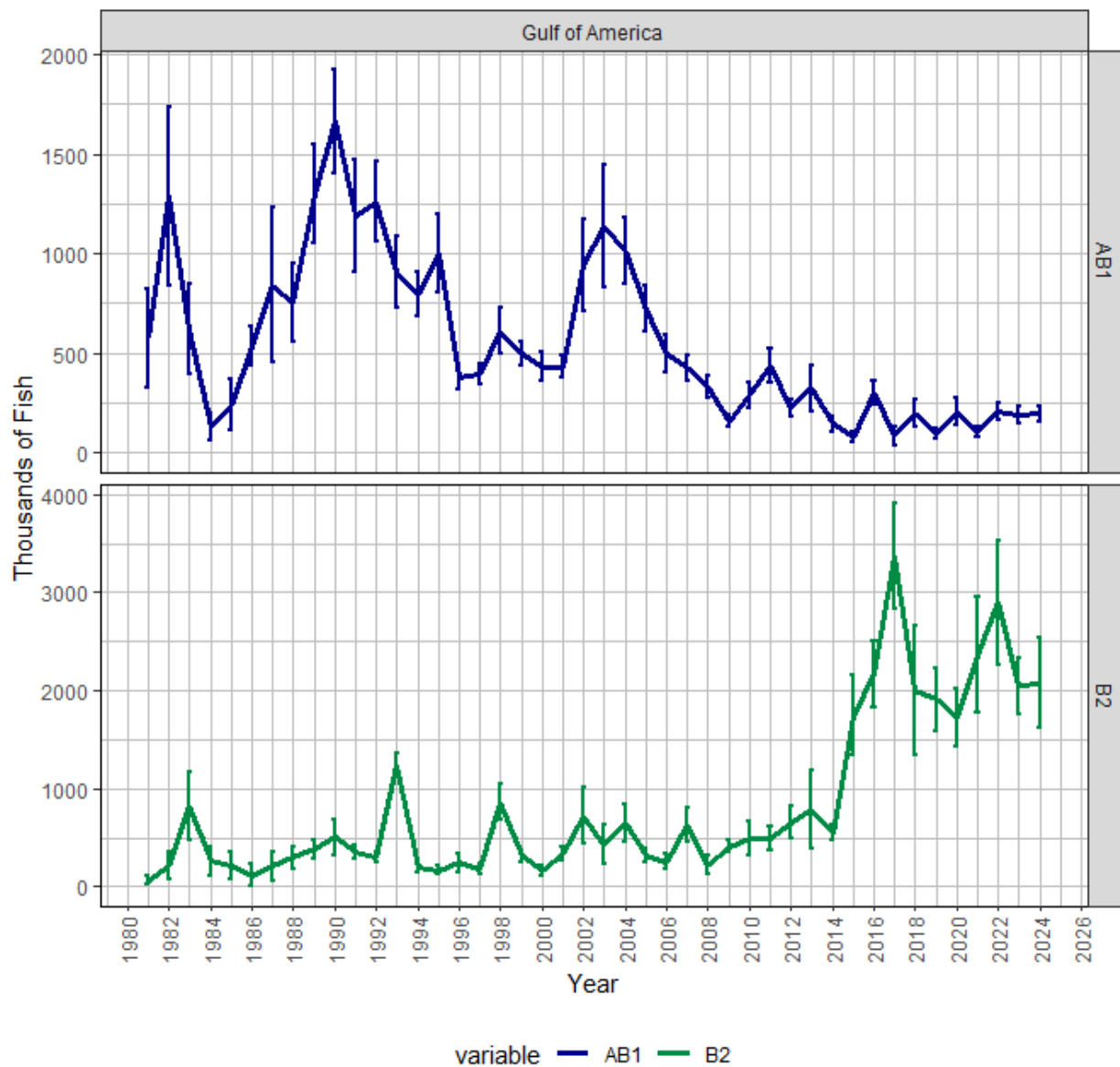


Figure 4.2. Annual landings (AB1) and discard (B2) estimates with standard error intervals, in thousands of fish, for **Gulf of America** (Texas to western Florida) Gray Triggerfish between 1981 to 2024.

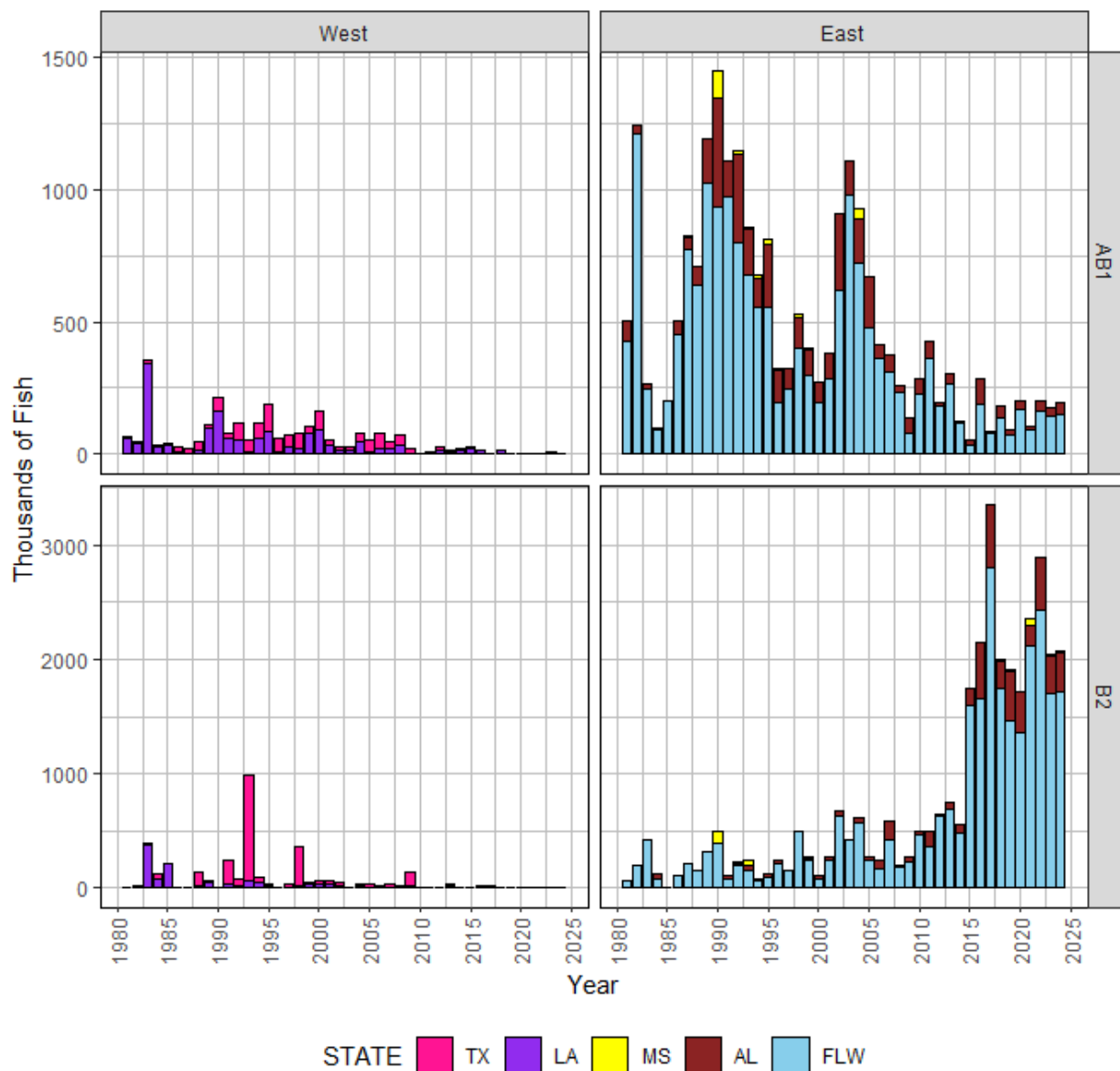


Figure 5a. Annual Gray Triggerfish landings (AB1) and discards (B2), in thousands of fish, by state from 1981 to 2024 from all data sources (MRIP, LACreel 2014+, TPWD). FLW excludes the Florida Keys.

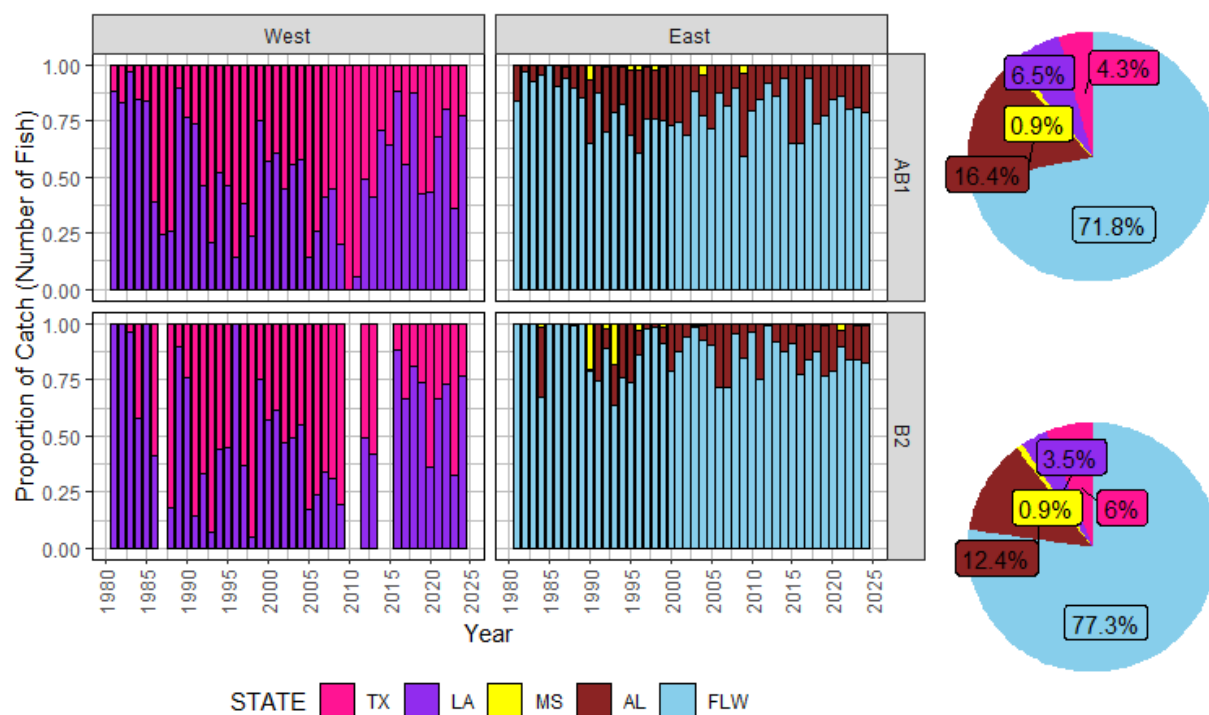


Figure 5b. Proportion of Gray Triggerfish landings (AB1) and discards (B2), in numbers of fish, from each state by year (bar graph) and overall (pie chart) between 1981 and 2024 from all data sources (MRIP, LACreel 2014+, TPWD). FLW excludes the Florida Keys.

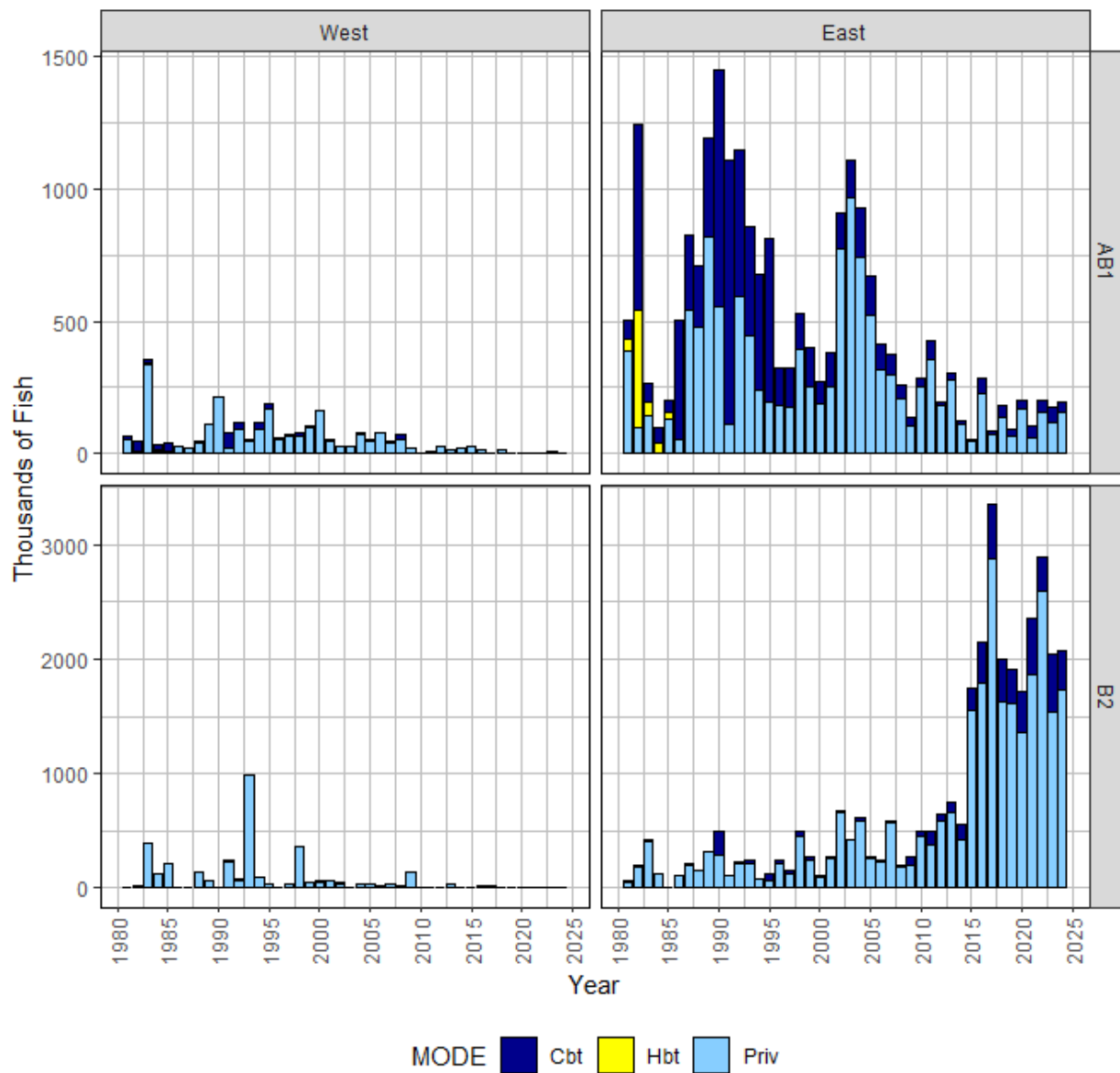


Figure 6a. Annual Gray Triggerfish landings (AB1) and discards (B2), in thousands of fish, by mode from 1981 to 2024 from all data sources (MRIP, LACreel 2014+, TPWD). Note that catch from the combined Private-Shore fishing mode in the LA Creel survey has been added to the Private mode.

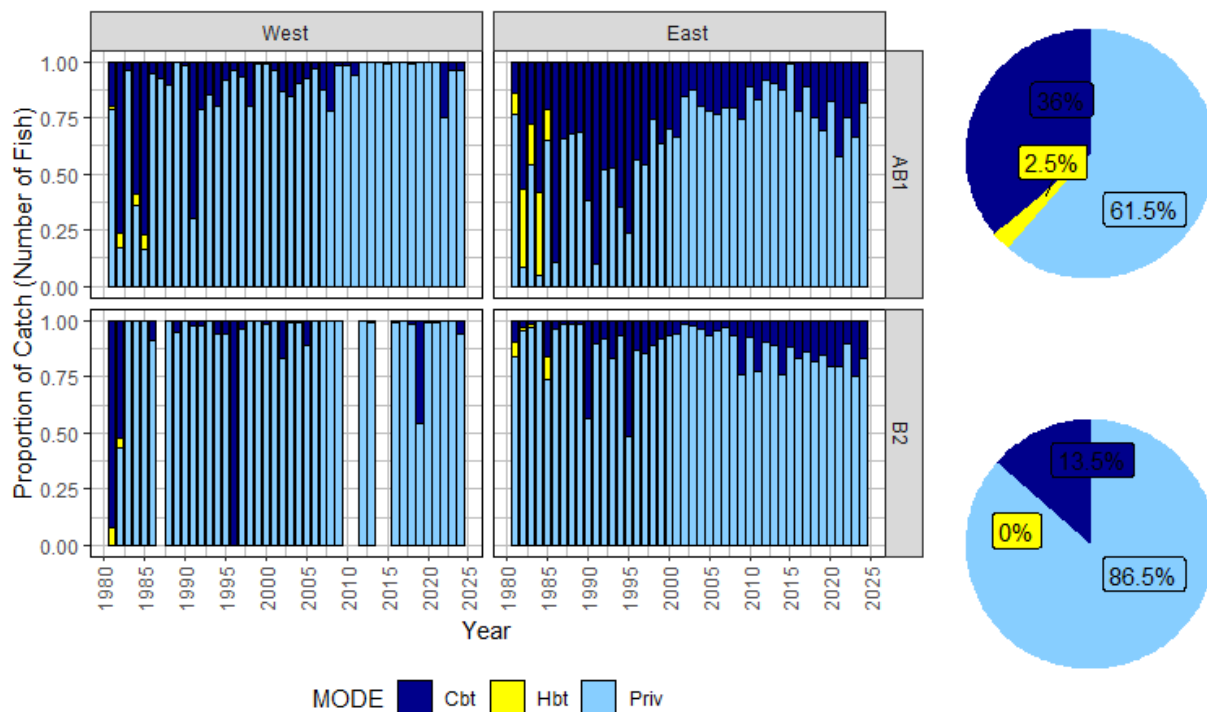


Figure 6b. Proportion of Gray Triggerfish landings (AB1) and discards (B2), in numbers of fish, from each mode by year (bar graph) and overall (pie chart) between 1981 and 2024 from all data sources (MRIP, LACreel 2014+, TPWD). Note that catch from the combined Private-Shore fishing mode in the LA Creel survey has been added to the Private mode.

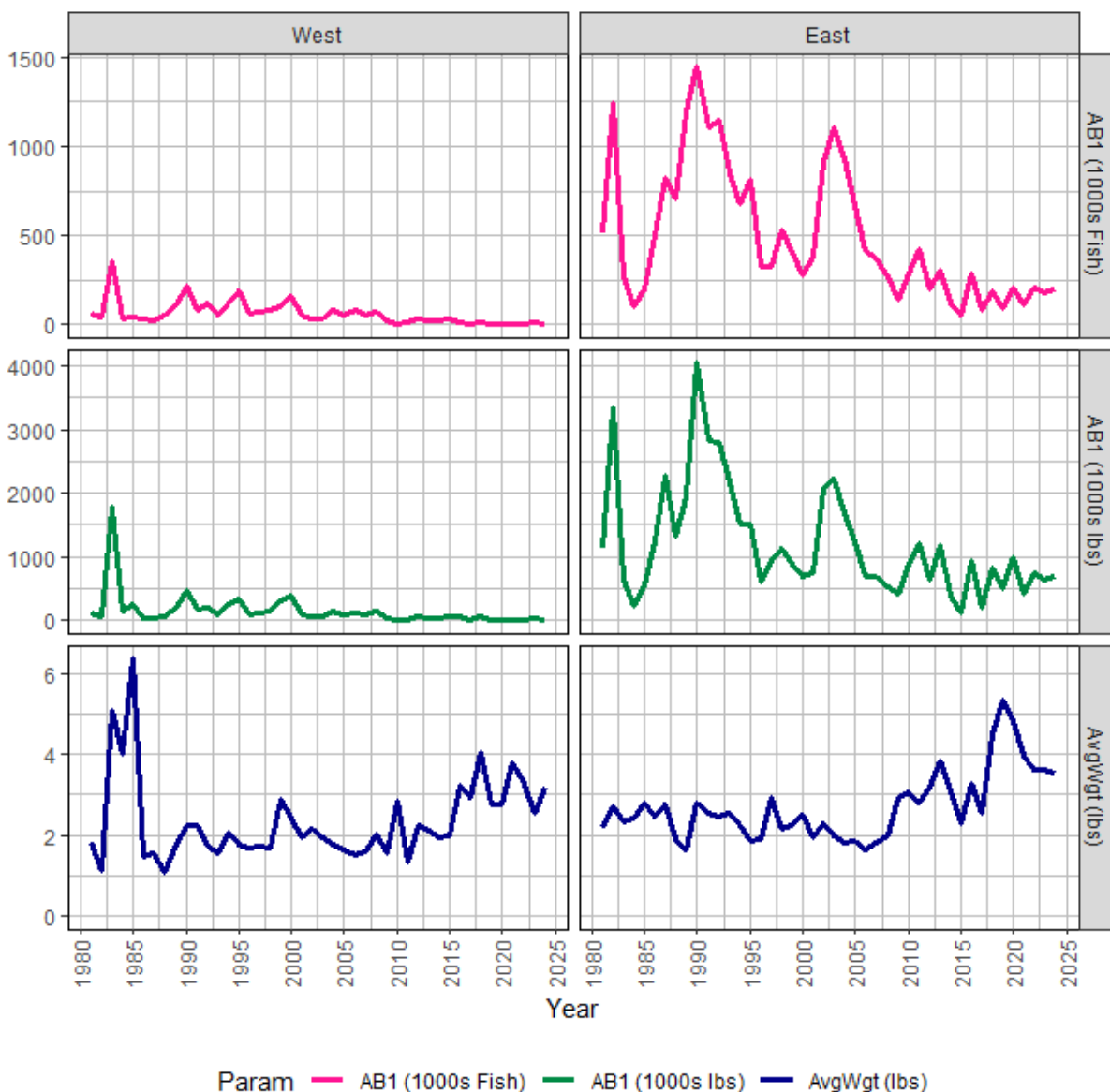


Figure 7. Estimates of annual landings for Gray Triggerfish in the Gulf of America from all data sources (MRIP, LACreel 2014+, TPWD): estimated landings in thousands of fish (top), estimated landings in thousands of pounds whole weight (middle), and average weight of landed fish (estimated lbs/estimated fish) (bottom). See Appendix for average weight calculation methods.

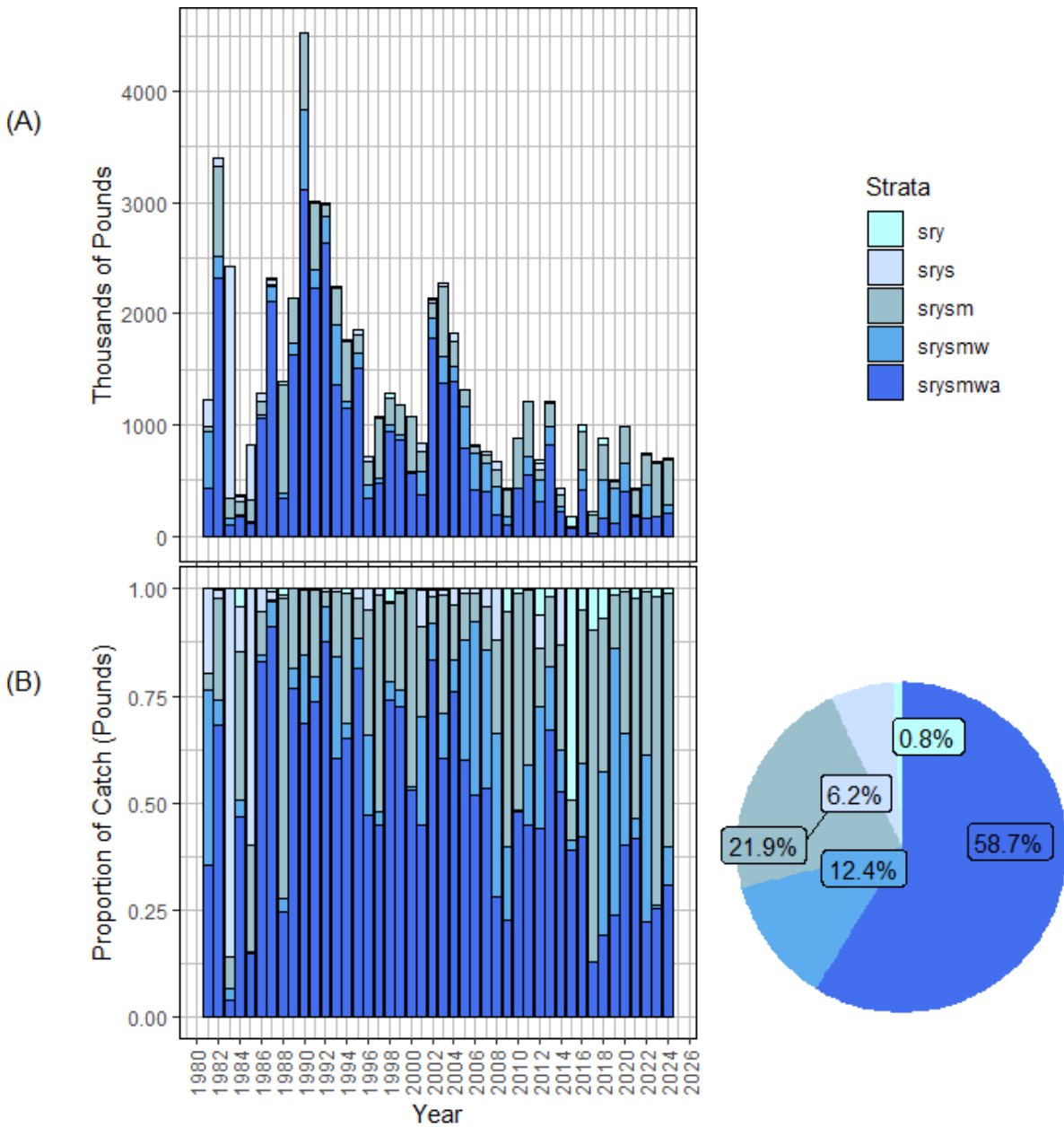


Figure 9. Annual landings estimates of Gulf of America Gray Triggerfish in thousands of pounds whole weight from all data sources (MRIP, LACreel 2014+, TPWD) by hierarchy level, defined by **species, region, year, state, mode, wave, and area**. Landings are grouped by the strata at which average weights were estimated. As an example, (srysmw) summarizes those landings-in-weight estimates originating from cells where average weights are specific to a particular **species, region, year, state, mode, and wave** (i.e., weight observations collapsed across areas). Annual summaries include the number of fish and angler trips from which weight information was collected (N) and the landings-in-weight estimates (AB1.lbs) by hierarchy level. Landings are provided (A) in absolute pounds and (B) as a percentage of total landings-in-weight, which is summarized by year (stacked bar graph) and across all years (pie chart).

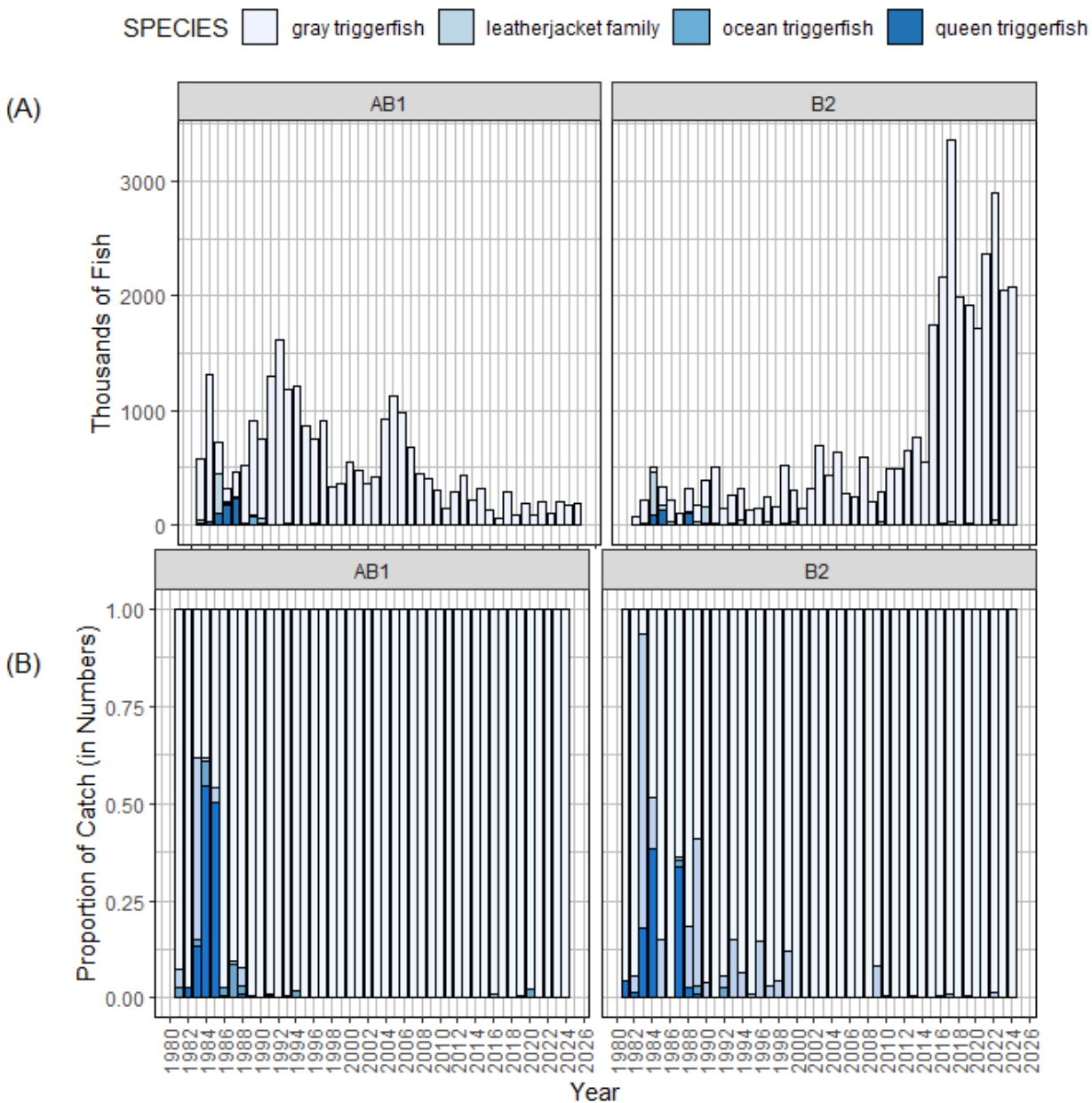


Figure 10. Annual landings estimates for all Gulf of America Triggerfish species in thousands of fish from all data sources (MRIP, LACreel 2014+, TPWD). Across those records identified to species, landings are summarized by year and provided (A) in absolute units and, (B) as a percentage of the total landings. (C) Catch estimates identified as Gray Triggerfish are also compared to that left unidentified (as Triggerfish).

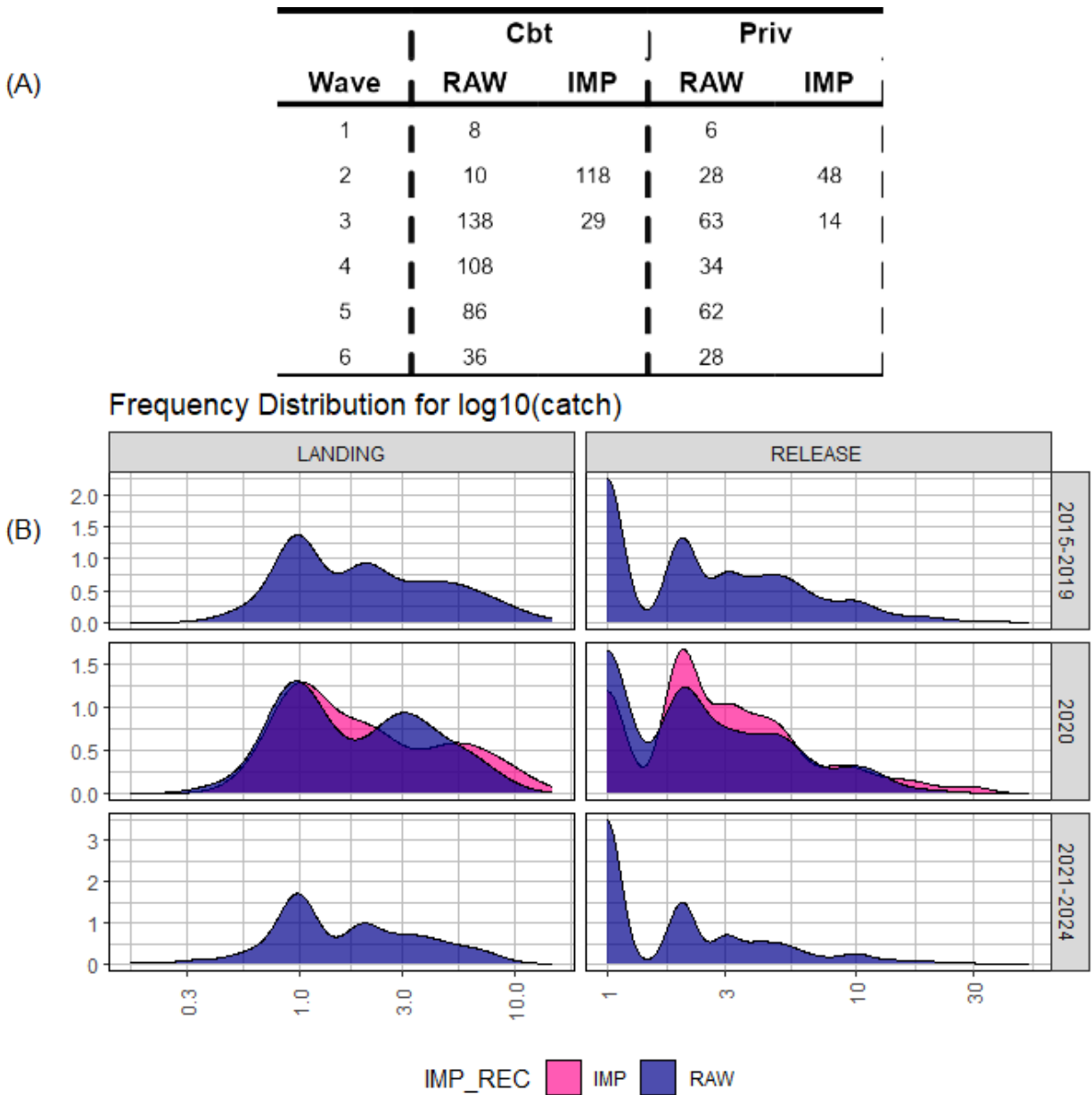


Figure 11. COVID data gaps in the MRIP APAIS and associated imputations for (positive) fishing trips that intercepted Gulf of America Gray Triggerfish. No 2020 data were imputed for the FES or FHS. (A) Number of positive intercepts in 2020 from the APAIS (RAW) vs. those imputed from intercepts in adjacent years (IMP). (B) Distribution of APAIS catch observations in years with no imputed catch data (in 2015-2019 and 2021-2024), in raw 2020 APAIS data, and in 2020 imputations. Refer to Cody (2021) for more information on COVID data gaps in MRIP.

Appendix A

Additional Details of Survey Data and SEFSC Estimation

- MRIP Calibrations: Fully calibrated estimates that take into account the change in the Fishing Effort Survey (FES; 2018), the redesigned Access Point Angler Intercept Survey (APAIS; 2013), and the For Hire Survey (FHS; 2000 for all Gulf of America states).
 - Papacostas and Foster (2021) provide descriptions of the approaches used by the Office of Science and Technology to calibrate MRIP (1) effort estimates derived from the legacy Coastal Household Telephone Survey (CHTS) into FES units for the private and shore modes and (2) catch rate estimates between the original and redesigned APAIS for all modes.
 - SEFSC calibrations of catch and effort estimates between CHTS and FHS units are calculated for the For-Hire mode by year, region, state, wave, and area fished according to Dettloff and Matter (2019a). Figure 1 summarizes the resultant scaling of CHTS catch estimates under the FHS calibration ratios.
- LA Creel Calibrations: Wave-specific calibrations, based on effort, were developed from benchmarking that was completed between 2015 to 2017 (West and Zhang 2020). The average wave-specific effort for both LA Creel and MRIP and the associated calibration are provided in the table below. These calibrations are for the combined Private/Shore mode.

Wave	\overline{Effort}_{MRIP}	$\overline{Effort}_{LAcreel}$	Calibration Ratio
1	1,514,700	192,365	7.8741
2	1,250,802	310,016	4.0346
3	1,806,223	576,575	3.1327
4	2,170,504	422,548	5.1367
5	2,163,949	389,363	5.5577
6	1,757,530	341,570	5.1454

- SEFSC Weight Estimation: Average (fish) weight estimates are calculated in whole weight by strata using the following hierarchy: species, region, year, state, mode, wave, and area (Matter and Rios 2013). The minimum number of weights used at each level of substitution is fifteen fish, except for the final species level where the minimum is one fish (Dettloff and Matter 2019b). Size records above an allowable (max size) threshold are excluded from weight estimation and the summary tables included in this working paper (Tables 7-10). For SEDAR 100 Gray Triggerfish, this includes any weights heavier than 14.2065 pounds.
- SEFSC Estimates derived using SEDAR best practices (SEDAR-PW-07):
 - The MRFSS survey began in wave2 of 1981. The preferred method was applied to fill-in this (1981 wave1) MRIP data gap, by which the proportion of the wave1 estimate to that from other waves (2-6) in years 1982-1984 (by fishing mode and

area) was multiplied by the total estimate from waves 2-6 in 1981. This approach was used to impute both the catch and effort estimates for this strata.

- Estimates from the TPWD survey are available starting in May (wave3) 1983. The average estimate (by mode and wave) from waves 1-2 in 1984-1985 and from waves 3-6 in years 1983-1985 were used to fill-in these (1981-1983) data gaps in Texas recreational estimates. This approach was used to impute both the catch and effort estimates for these strata.
- The TPWD survey does not estimate discards. As a proxy for recreational discards from Texas private and charterboat anglers, discard:landings ratios (B2:AB1) are calculated (by year and mode) from Louisiana catch estimates and multiplied by TPWD landings estimates.
- To ensure sampling can support MRIP estimates at finer stratifications than for which the survey was designed, (sub-state) domain estimates are only generated for established geographic domains. For Florida, this includes the sub-state domains of Florida in the FHS (1 = Florida panhandle, Escambia to Dixie; 2 = western Florida, Levy to Collier).
- Between 1981 and 1985 in the Gulf of America, MRIP charter and headboat modes were combined into a single (for-hire) mode for estimation purposes. Since the NMFS Southeast Region Headboat Survey (SRHS) began in 1986 in the Gulf, the MRIP combined for-hire mode must be split to provide estimates of headboat landings in these early years. Estimates for the MRIP for-hire mode (1981-1985) were split using a ratio of SRHS headboat angler trip estimates to MRIP charterboat angler trip estimates for 1986-1990, calculated by state (or state equivalent to match SRHS areas to MRIP states).