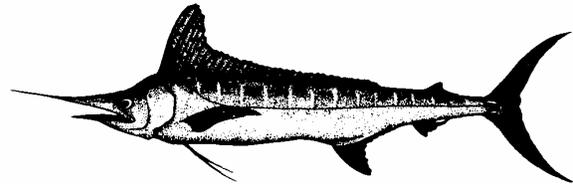
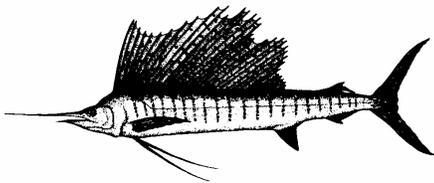




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INTRODUCTION

The US Fish and Wildlife Service first identified billfishes (blue marlin, *Makaira nigricans*; white marlin, *Tetrapturus albidus*; sailfish, *Istiophorous platypterus*; swordfish, *Xiphias gladius*; and longbill spearfish, *Tetrapturus pfluegeri*) as an abundant species grouping in the northern Gulf of Mexico (GOM) in the mid 1950s. Within the next decade, recreational big game fishing in the GOM became increasingly popular and sportfishing clubs dedicated exclusively to billfishing began to be established along the entire US Gulf coast. At first, scientists at the National Marine Fisheries Service (NMFS) informally monitored this new fishery through the cooperation of the clubs¹. However, as organized fishing activity for billfish throughout the US GOM continued to increase, the necessity for a program for monitoring fishing success and average weights of billfish became apparent. As a result, in 1971, the NMFS Recreational Billfish Survey (RBS) was formed and, in 1972, was expanded to include the western North Atlantic and US territories in the Caribbean Sea. Today, the RBS collects data from billfish tournaments that take place in the Bahamas as well.

Billfish catches in the US were unregulated until 1988, when declining biomass projections prompted the NMFS

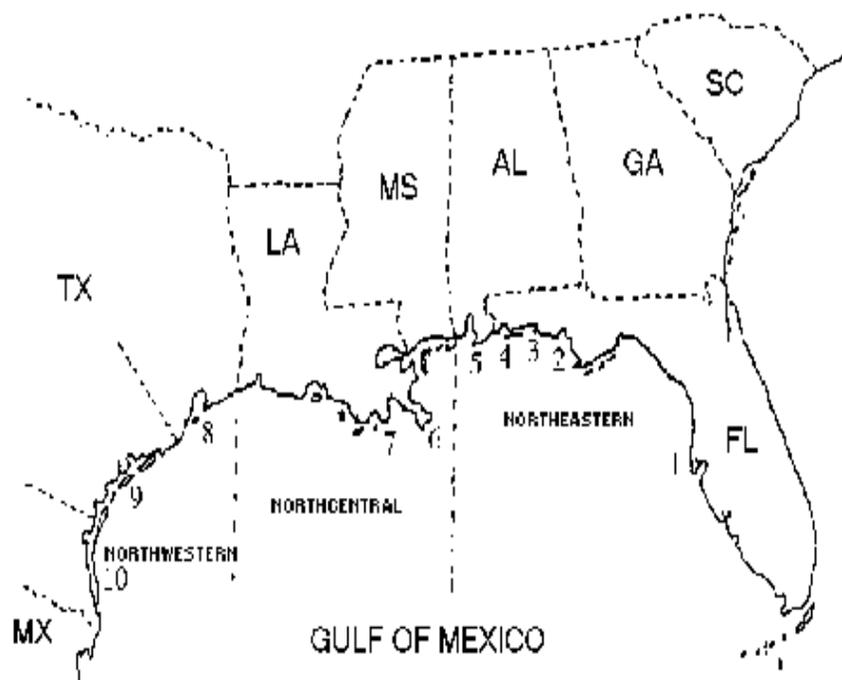
¹ The New Orleans Big Game Fishing Club kept accurate records of its tournament fishing activities since it was formed in 1961. Data from club records were used by the NMFS in the first analysis of billfish abundance in the northern Gulf of Mexico. The report is entitled "An Analysis of the Catches and the Biology of Big Game Fishes Caught by the New Orleans Big Game Fishing Club, 1966-70" by E. Nakamura, Eastern Gulf Sport Fishery Marine Laboratory, Panama City, FL. May, 1971.

to prohibit the retention of Atlantic marlins and sailfish by commercial fishing vessels in US waters. Recreational landings were allowed to continue, but minimum size restrictions for blue marlin, white marlin, and sailfish were implemented and remain to the present. As a result, the RBS has become an increasingly important source of data for developing abundance indices and, with catch reports from approximately 180 billfish tournaments a year, the RBS is the primary source of US recreational billfish catch and effort statistics used for stock assessments.

This paper reports on data collected by the RBS for the GOM portion of the Atlantic billfish tournament fishery from 1996 through 2000. Weight, catch and effort data for each of the five years are presented both by area and by species.

WEIGHT

Table 1 provides weight data collected by the RBS from 1996 through 2000 for blue marlin, white marlin and sailfish. One longbill spearfish landed in 1997 and weighing 48 lbs was also recorded by the RBS but not shown in the table. Since 1998 landing a spearfish has been prohibited. For each year and species, the weights of the largest and smallest fish are shown, as well as the average weight and number of fish with recorded weights. Trends in the size of billfish landed are not necessarily an indication of the average size of the billfish population because of minimum size regulation, which were first mandated by the Atlantic Billfish Fishery Management Plan in 1988. In the last several years, minimum sizes for all three billfish species have been increased. Additionally, numbers of billfish weighed may differ from the total



- | | |
|----------------------------------|--------------------------------------|
| 1. Tampa/St. Petersburg, Florida | 6. South Pass, Louisiana |
| 2. Panama City, Florida | 7. Grand Isle, Louisiana |
| 3. Destin, Florida | 8. Galveston/Freeport, Texas |
| 4. Pensacola, Florida | 9. Port O'Connor/Port Aransas, Texas |
| 5. Orange Beach, Florida | 10. South Padre Island, Texas |

Figure 1. Data from the Gulf of Mexico are summarized for the northwestern (NW), north central (NC), and northeastern (NE) regions. Tournament ports that were sampled from 1996 to 2000 are shown.

number of billfish landed as weights are not always collected or recorded at weigh-in.

Blue Marlin: The largest blue marlin caught over the 5-year period covered by this report was a 918.2 lb fish that was landed at the Mississippi Gulf Coast Classic in Biloxi, Mississippi in June, 1997. This blue marlin is in the top 0.1% of those recorded by the RBS and remains the Mississippi State record. For both 1996 and 1998, the largest blue marlin recorded in the northern GOM were caught at Poco Bueno, a tournament that takes place each July in Port

O'Connor, Texas. In 1999, the largest blue marlin weighed in the GOM was 708.5 lb, reported from the Pensacola Ladies Billfish Tournament out of Perdido Key, Florida in July. In 2000, the largest blue marlin weighed was 681 lb, caught in May at the Mobile Big Game Fishing Club Memorial Day tournament in Orange Beach, Alabama.

The smallest blue marlin weights recorded in the northern GOM in 1996 and 1997, when the minimum size limit for blue marlin was 86" lower-jaw-fork-length (LJFL), are 185.7 and 189.6 lb, respectively. An 86" LJFL blue marlin is

estimated to weigh about 198 lb (Prager *et al.* 1995). In 1998, when the minimum size was increased to 96" LJFL, corresponding to a blue marlin weighing about 286 lb (Prager *et al.* 1995), the smallest blue marlin recorded for the year was 293.6 lb. In June of 1999, the minimum size was again increased. The new minimum size of 99" LJFL is estimated to be a 317 lb blue marlin, however, the higher size limit was not in effect for the first 5 months of the year. As a result, the minimum weight of 284.3 lb recorded from the GOM for blue marlin in 1999 reflects the 96" size restriction that had already been in place for a year. In 2000, the first calendar year that the 99" LJFL minimum size was in effect for the entire year, the smallest blue marlin recorded by the RBS in the GOM was 289.3 lbs.

The average weight for the 52 blue marlin boated and weighed in 1996 was 332.4 lbs. In 1997, the average weight of 72 fish was 341.6 lbs. With only 24 blue marlin weights recorded in 1998, the average weight was 422.6 lbs while in 1999, the year the higher (99") minimum size limit was implemented; the average weight of 35 fish was 452.3 lbs. Higher minimum size limits can be expected to raise the mean size of landings as only bigger, heavier fish can be legally retained (Venizelos *et al.* In review). However, in 2000, the first calendar year that the 99" LJFL minimum size was in effect for the entire year, the average weight of the 23 blue marlin caught in the GOM with recorded weights was 396.6 lbs. This was 25.8 lbs less than the average reported in 1998, when the minimum size limit was 96".

White Marlin: For white marlin, the minimum size was increased in 1998 from 62" to 66" LJFL. This change was estimated to result in a 10-lb difference

(from 48 to 58 lb) in the weight of the fish (Prager *et. al*) but did not have an observable effect on the weight of white marlin landings in the GOM. This may be due, in part, to the switch by several large tournaments to a release-only format, particularly after the 1997 fishing season.

The largest white marlin weighed in 1996 in the GOM tournament fishery was 75.6 lb, recorded during the Grand Isle Tarpon Rodeo from South Pass, Louisiana. In 1997, the largest white marlin was 98.8 lb from the Mobile Big Game Fishing Club Memorial Day tournament in Orange Beach, Alabama. The largest white marlin recorded in the GOM in 1998 was 71.1 lb, caught during the Poco Bueno tournament in Port O'Connor, Texas, while in 1999, the largest fish recorded was 66.4 lb from the Destin Fishing Rodeo out of Destin, Florida. There were no white marlin landings reported from tournaments in the GOM in 2000.

For 1996 through 1999, the smallest white marlin landed in the GOM tournament fishery with recorded weights were 46.8 lb, 46.1 lb, 51.3 lb and 42.9 lb, respectively. The average weights for the same 4-year period were 56.2 lb, 55.8 lb, 59.3 lb and 51.8 lb, respectively, with sample sizes progressively decreasing. In 2000, all tournament-caught white marlin in the GOM were released.

Sailfish: Minimum size limits for sailfish were increased from 57" to 63" LJFL in 1998. This change was estimated to result in an 11-lb difference (from 29 to 40 lb) in the weight of the fish (Prager *et. al*). As with white marlin, the increase in the size restrictions did not have an appreciable effect on the weight of sailfish landed in the GOM. Although several large tournaments

switched to catch and release fishing, the decline in the numbers of sailfish landed was not as dramatic as that of white marlin.

The largest sailfish weighed in 1996 was 77.4 lb, reported during the Pensacola International Billfish Tournament in Pensacola, Florida. The largest sailfish weight recorded in 1997 was 60.1 lb, sampled during the Monkey Boat Billfish Tournament in Perdido Key, Florida. In 1998, the largest sailfish weighed was 75.6 lb, recorded during the Port Aransas Deep-Sea Roundup in Port Aransas, Texas. The largest sailfish weighed in 1999 was 63.2 lb, recorded during the Poco Bueno tournament in Port O'Connor, Texas. In 2000, the largest sailfish weighed 41 lb and was caught during the Port Mansfield Billfishing Tournament in Port Mansfield, Texas.

The smallest sailfish in the GOM tournament fishery in both 1996 and 1997 weighed 33 lb. Similarly, in 1998, the smallest sailfish weighed in at 33.5 lb. In 1999, the smallest of 26 sailfish weighed was 28.7 lb. In 2000, the smallest sailfish of the 9 sampled that year was 41 lb.

The average weights of sailfish landed in the GOM from 1996 through 2000 remained relatively constant at 46.5 lb, 45 lb, 46.9 lb, 44.7 lb and 48 lb, respectively, while sample sizes decreased from a high of 40 sailfish in 1998 to only 9 in 2000.

CATCH AND EFFORT

The RBS collects information from billfish tournaments that includes the number of hours fished and the number of billfish (by species) boated, caught and released, or released dead (dead discards). These data are used to develop indices of

fishing success and relative abundance known as catch-per-unit-effort (CPUE). The CPUE is calculated by dividing the number of fish caught (boated as well as released) by the total fishing effort. Fishing effort is the total number of boats fishing in each tournament multiplied by the total number of hours fished (or trolled), even if it does not result in a billfish catch. Non-tournament catch and catch with no associated effort information is also recorded by the RBS but is not included in CPUE calculations. Since many of the billfish catches reported in the U.S. recreational fishery occur during tournaments, CPUE trends from the RBS are critical for making management decisions to ensure that the U.S. can meet domestic and international regulatory requirements and conservation goals.

Table 2 shows tournament catch, fishing effort and CPUE by year for the eastern, central and western sections of the U.S. GOM (Figure 1) from 1996 to 2000. For each year and area, the number of billfish boated, released, and tagged and released are given for blue marlin, white marlin, sailfish, and spearfish, as well as total effort and CPUE. Catch with no associated effort is not shown in Table 2.

The gross effort used to calculate CPUE is the total fishing effort for all tournaments in a given year and is therefore the same for each species each year. As a result, fluctuations in CPUE may reflect changes in directed effort from one billfish species to another in addition to differences in relative abundance from one year to the next.

1996

During 1996, a total of 19,496 hr of fishing effort for billfish was recorded by the RBS from 46 tournaments that took

place along the U.S. coast of the GOM. Of that, 47% (9,149 hr) was recorded from the eastern GOM, 29% (5,639 hr) from the central GOM, and 24% (4,708 hr) from the western portion of the GOM fishery. For comparison, total effort in the 1996 GOM billfish tournament fishery decreased by 1,496 hr from 1995, when the RBS recorded 20,992 hours of fishing effort.

During 1996, 483 billfishes were reported as caught; 55% were blue marlin (268), 24% were white marlin (115), and 20% were sailfish (99). One spearfish was tagged and released.

A total of 108 billfish were boated (22%) and 375 released (78%) in the GOM tournament fishery in 1996 (Figure 2). Although most of the releases were tagged, about 8% of all species of billfishes combined were released without being tagged. Approximately 81% of the blue marlin, 80% of the white marlin, and 66% of the sailfish caught were released.

In 1996, the CPUE for tournament-caught blue marlin for the entire GOM was 1.4 fish per 100 hr of trolling. The central portion of the GOM fishery had the highest CPUE of the 3 areas examined (2.0 blue marlin per 100 hr fishing). The CPUE for white marlin was 0.6 fish per 100 hr of effort, with the highest CPUE for this species (0.7 white marlin per 100 hr fishing) recorded from the eastern GOM. For sailfish, the CPUE was 0.5, with the highest CPUE for this species (1.7 sailfish per 100 hr fishing) recorded from the western GOM.

1997

During 1997, fishing effort for billfish, as recorded by the RBS, increased by 8% from 1996. A total of 21,084 hr of effort was recorded from 44 tournaments that

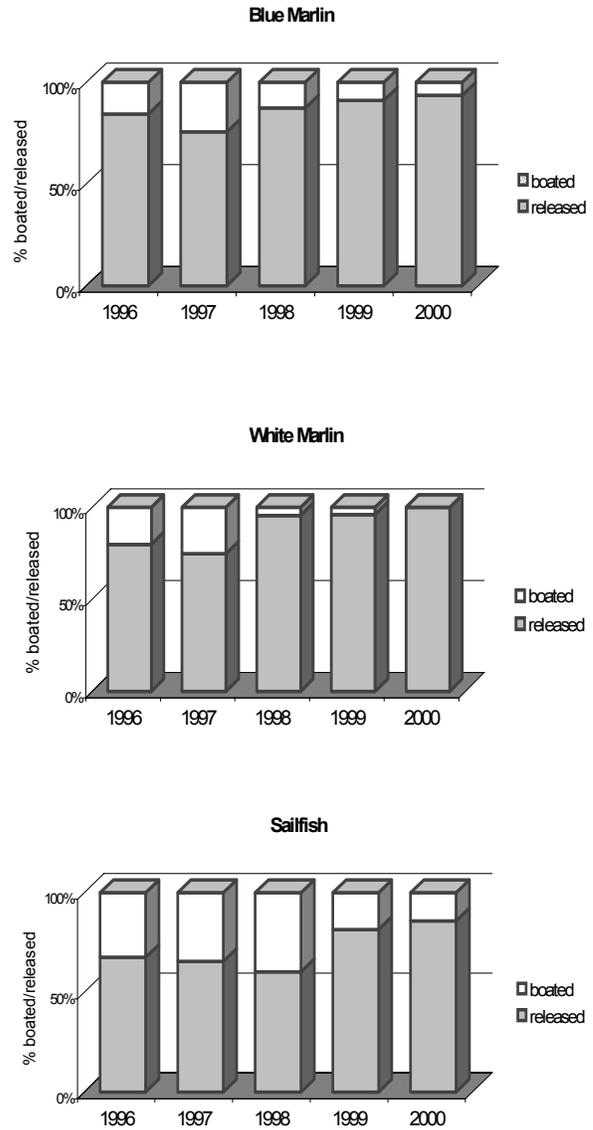


Figure 2. Percentage of boated vs. released blue marlin, white marlin and sailfish from the Gulf of Mexico tournament fishery from 1996-2000.

took place along the U.S. coast of the GOM. Of that, about 44% (9,203 hr) was recorded from the eastern GOM, 34% (7,088 hr) from the central GOM, and 23% (4,793 hr) from the western portion of the GOM fishery. For comparison, total effort in the 1997 GOM

billfish tournament fishery increased by 1,588 hr from 1996.

In 1997, 445 billfishes were reported as caught; 54% were blue marlin (240), 32% were white marlin (142), and 14% were sailfish (61). Two spearfish were also caught; one was landed and one was released.

In all, 124 billfish were boated (28%) and 321 released (Figure 2) in the GOM tournament fishery in 1997. Although most of the releases were tagged, about 10% of all species of billfishes combined were released without being tagged. Approximately 72% of the blue marlin, 75% of the white marlin, and 66% of the sailfish caught were released.

In 1997, the CPUE for tournament-caught blue marlin in the GOM was 1.4 fish per 100 hr of trolling, with the CPUE for the central portion of the GOM fishery (2.0 blue marlin per 100 hr fishing) the highest of the 3 areas examined. The CPUE for white marlin was 0.7 fish per 100 hr of trolling, with the highest CPUE for this species (1.2 white marlin per 100 hr fishing) recorded from the western GOM. For sailfish, the CPUE was 0.3 per 100 hr of trolling, with the highest CPUE (1.0 sailfish per 100 hr fishing) in the western GOM.

1998

During 1998, fishing effort for billfish, as recorded by the RBS, decreased by 9% from 1997. A total of 19,427 hr of effort was recorded from 41 tournaments that took place along the U.S. coast of the GOM. Of that, about 47% (9,064 hr) was recorded from the eastern GOM, 33% (6,443 hr) from the central GOM, and 20% (3,920 hr) from the western portion of the GOM fishery. For comparison, total effort in the 1998 GOM

billfish tournament fishery decreased by 1,657 hr from 1997.

In 1998, 397 billfishes were reported as caught in the GOM tournament fishery; 38% were blue marlin (151), 32% were white marlin (126), and 30% were sailfish (119). One spearfish was also caught and released.

In all, 68 billfish were boated (17%) and 329 released in the GOM tournament fishery in 1998. This 55% reduction in landings from the previous year corresponds to increases in minimum size limits that were implemented in early 1998. The same year, approximately 84% of the blue marlin, 91% of the white marlin, and 49% of the sailfish caught were released. Over 91% of all billfishes caught in the GOM tournament fishery were tagged before release.

In 1998, the CPUE for tournament-caught blue marlin in the GOM was 0.8 fish per 100 hr trolling, with the CPUE for the central portion of the GOM fishery (1.2 blue marlin per 100 hr fishing) the highest of the 3 areas examined. The CPUE for white marlin was 0.6 fish per 100 hr of trolling, with the highest CPUE for this species (0.8 white marlin per 100 hr fishing) recorded from the western GOM. For sailfish, the CPUE was 0.6 per 100 hr of trolling, with the highest CPUE (2.7 sailfish per 100 hr fishing) in the western GOM.

1999

During 1999, fishing effort for billfish, as recorded by the RBS, increased by 36% from 1998. A total of 29,985 hr of effort was recorded from 53 tournaments that took place along the U.S. coast of the GOM. Of that, about 48% (14,283 hr) was recorded from the eastern GOM, 26% (7,739 hr) from the central GOM, and 27% (7,963 hr) from the western

portion of the GOM fishery. For comparison, total effort in the 1999 GOM billfish tournament fishery increased by 10,558 hr from 1998.

In 1999, 635 billfishes were reported as caught in the GOM tournament fishery; 55% were blue marlin (347), 23% were white marlin (146), and 22% were sailfish (140). Two spearfish were also caught and released.

A total of 68 billfish were boated (11%) and 565 released in the GOM tournament fishery in 1999. The number of landings was the same as the previous year while there was a 72% increase in the number of billfish released. Approximately 90% of the blue marlin, 96% of the white marlin, and 81% of the sailfish caught were released.

In 1999, the CPUE for tournament-caught blue marlin in the GOM was 1.2 fish per 100 hr of trolling, with the CPUE for the central portion of the GOM fishery (2.1 blue marlin per 100 hr fishing) the highest of the 3 areas examined. The CPUE for white marlin was 0.5 fish per 100 hr of trolling, with the highest CPUE for this species (0.6 white marlin per 100 hr fishing) recorded from the western GOM. For sailfish, the CPUE was 1.4 per 100 hr of trolling, with the highest CPUE (2.7 sailfish per 100 hr fishing) in the western GOM.

2000

During 2000, fishing effort for billfish, as recorded by the RBS, decreased by nearly 7% from 1999. A total of 27,967 hr of effort was recorded from 46 tournaments that took place along the U.S. coast of the GOM. Of that, about 45% (12,619 hr) was recorded from the eastern GOM, 22% (6,020 hr) from the central GOM, and 33% (9,328 hr) from the western portion of the GOM fishery. For

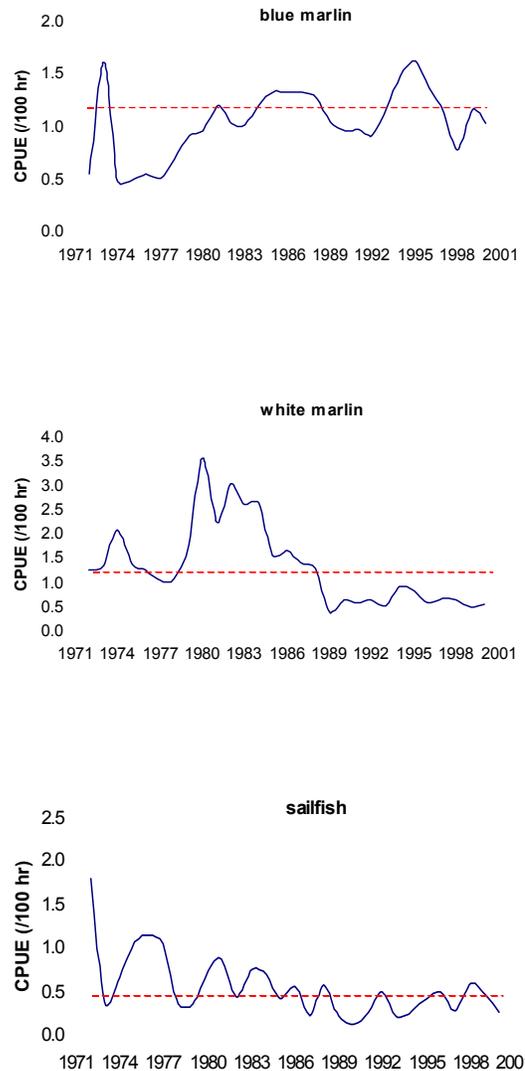


Figure 3. Catch of blue marlin, white marlin and sailfish per 100 hours of fishing effort (CPUE) in the northern Gulf of Mexico tournament fishery from 1972 to 2000. The dotted horizontal lines represent the mean CPUEs for the 28-year time period for each species.

comparison, total effort in the 2000 GOM billfish tournament fishery increased by 1,588 hr from 1999.

In 2000, 526 billfishes were reported as caught in the GOM tournament fishery;

55% were blue marlin (291), 30% were white marlin (158), and 14% were sailfish (76). One spearfish was also caught and released.

A total of 34 billfish were boated (11%) and 492 released in the GOM tournament fishery in 1999. The number of landings was the half that of the previous year while there was also a 13% decrease in the number of billfish released. Approximately 92% of the blue marlin, 100% of the white marlin, and 86% of the sailfish caught were released.

In 2000, the CPUE for tournament-caught blue marlin in the GOM was 1.0 fish per 100 hr of trolling, with the CPUE for the central portion of the GOM fishery (2.0 blue marlin per 100 hr fishing) the highest of the 3 areas examined. The CPUE for white marlin was 0.6 fish per 100 hr of trolling, with the highest CPUE for this species (1.0 white marlin per 100 hr fishing) recorded from the eastern GOM. For sailfish, the CPUE was 0.3 per 100 hr of trolling, with the highest CPUE (0.5 sailfish per 100 hr fishing) in the western GOM.

Trends in CPUE

Trends in CPUE over time allow fishery managers to make inferences about the abundance of billfish stocks and the level of fishing pressure on them. Figure 3 shows the CPUE for blue marlin, white marlin and sailfish from the GOM tournament fishery from 1975 to 2000.

For blue marlin, the highest CPUEs in the GOM tournament fishery from 1972 through 2000 occurred in the early 1970s and mid-1990s. While low catch rates characterized the late 1970s, CPUEs hovered around the mean of 1.2 throughout the 1980s. After the peak of 1.63 in 1995, there has been a decreasing trend in CPUE, which has remained at or below the mean since 1997.

White marlin CPUEs exhibited a sharp increase in 1980 and remained high until 1985, when they began to steadily decrease. Since 1989, white marlin CPUEs have remained well below the historical mean of 1.3.

The trend in sailfish CPUEs in the GOM tournament fishery has been one of gradual decline from 1972 to 2000. For most years since 1986, the CPUEs have remained below the historical mean of 0.46.

**Weights Of Billfish Landed In The Gulf of Mexico Tournament Fishery
1996-2000**

Year	Species	Max weight (lbs)	Minimum weight (lbs)	Average weight (lbs)	Total number of fish weighed	Tournament that recorded largest billfish of the year
1996	Blue marlin	548.8	185.7	332.4	52	Poco Bueno
	White marlin	75.6	46.8	56.2	23	Grand Isle Tarpon Rodeo
	sailfish	77.4	33.0	46.5	28	Pensacola International
1997	Blue marlin	918.2	189.6	341.6	72	Mississippi Gulf Coast Classic
	White marlin	98.9	46.1	55.8	30	Mobile BGFC Memorial Day
	sailfish	60.1	33.0	45.0	15	Monkey Boat Billfish Tournament
1998	Blue marlin	619.5	293.8	422.6	24	Poco Bueno
	White marlin	71.1	51.3	59.3	5	Poco Bueno
	sailfish	75.6	33.5	46.9	40	Port Aransas Deep Sea Roundup
1999	Blue marlin	708.5	284.3	452.3	35	Pensacola Ladies Billfish Tournament
	White marlin	66.4	42.9	51.8	6	Destin Fishing Rodeo
	sailfish	63.2	28.7	44.7	26	Poco Bueno
2000	Blue marlin	681.0	289.3	396.8	23	Mobile BGFC Memorial Day
	White marlin				0	None recorded
	sailfish	67.9	41.0	48.0	9	Port Mansfield Fishing

Table 1. The maximum, minimum and average weights of blue marlin, white marlin and sailfish landed in the Gulf of Mexico tournament fishery for billfish from 1996 to 2000. The name of the tournament where the largest billfish of each species was caught is given for each year.

Table 2. The number of blue marlin, white marlin, sailfish and spearfish boated and released with tags (Tag) and without tags (Rel) from 1996 to 2000 in the Gulf of Mexico tournament fishery. The data were separated by area into northeastern, north central and northwestern Gulf of Mexico. Gross fishing effort and catch-per-unit-effort per 100 fishing hours (CPUE) are also shown for each area and species.

1996 Gross fishing effort 9,149 hrs						Gross fishing effort 5,639 hrs						Gross fishing effort 4,708 hrs					
Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE
blue marlin	30	3	58	91	1.0	blue marlin	9	0	105	114	2.0	blue marlin	12	10	41	63	1.3
white marlin	20	4	40	64	0.7	white marlin	1	1	24	26	0.5	white marlin	2	6	17	25	0.5
sailfish	13	1	3	17	0.2	sailfish	0	0	4	4	0.1	sailfish	21	6	51	78	1.7
												spearfish	0	0	1	1	-
1997 Gross fishing effort 9,203 hrs						Gross fishing effort 7,088 hrs						Gross fishing effort 4,793 hrs					
Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE
blue marlin	29	5	35	69	0.7	blue marlin	19	0	97	116	1.6	blue marlin	19	14	22	55	1.1
white marlin	14	3	41	58	0.6	white marlin	0	0	28	28	0.4	white marlin	21	5	30	56	1.2
sailfish	4	1	4	9	0.1	sailfish	0	0	4	4	0.1	sailfish	17	5	26	48	1.0
spearfish	1	0	0	1	-							spearfish	0	0	1	1	-
1998 Gross fishing effort 9,064 hrs						Gross fishing effort 6,443 hrs						Gross fishing effort 3,920 hrs					
Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE
blue marlin	14	2	33	49	0.5	blue marlin	6	0	71	77	1.2	blue marlin	2	0	23	25	0.6
white marlin	2	4	41	47	0.5	white marlin	1	1	44	46	0.7	white marlin	1	2	30	33	0.8
sailfish	2	5	5	12	0.1	sailfish	0	0	3	3	-	sailfish	40	14	50	104	2.7
						spearfish	0	0	1	1	-						
1999 Gross fishing effort 14,283 hrs						Gross fishing effort 7,739 hrs						Gross fishing effort 7,963 hrs					
Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE
blue marlin	14	1	76	91	0.6	blue marlin	12	2	147	161	2.1	blue marlin	9	1	85	95	1.2
white marlin	2	0	55	57	0.4	white marlin	0	0	39	39	0.5	white marlin	4	4	42	50	0.6
sailfish	4	0	15	19	0.1	sailfish	0	0	8	8	0.1	sailfish	23	8	82	113	1.4
spearfish	0	0	1	1	-	spearfish	0	0	1	1	-						
2000 Gross fishing effort 12,619 hrs						Gross fishing effort 6,020 hrs						Gross fishing effort 9,328 hrs					
Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE	Species	Boat	Rel	Tag	Total	CPUE
blue marlin	14	7	106	127	1.0	blue marlin	3	2	92	97	1.6	blue marlin	6	25	36	67	0.7
white marlin	0	3	118	121	1.0	white marlin	0	0	27	27	0.4	white marlin	0	4	6	10	0.1
sailfish	1	0	20	21	0.2	sailfish	0	0	6	6	0.1	sailfish	10	11	28	49	0.5
												spearfish	0	0	1	1	-

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Tournaments and clubs that actively assisted the NMFS in the GOM from 1996-2000:

<u>Name</u>	<u>Location</u>
Florida West Coast Championship Tournaments	Madeira Beach, FL
Old Salts Fishing Club	St. Petersburg, FL
Tierra Verde Bluewater Classic	Tierra Verde, FL
Bay Point Invitational Billfish Tournament	Panama City, FL
Ladies Anchorage Benefit Billfish Tournament	Panama City, FL
Poorman's Shoot Off	Panama City, FL
Fort Walton Beach Sailfish Club	Ft. Walton Bch, FL
Pensacola Big Game Fishing Club	Pensacola, FL
Pensacola International Tournament	Pensacola, FL
Blue Marlin Classic Tournament	Perdido Key, FL
Mobile Big Game Fishing Club	Mobile, AL
Mississippi Gulf Coast Billfish Classic	Biloxi, MS
Mississippi Big Game Fishing Club	Biloxi, MS
New Orleans Big Game Fishing Club	New Orleans, LA
Baton Rouge Big Game Fishing Club	Baton Rouge, LA
Poco Bueno Tournament	Port O'Connor, TX
South Texas Big Game Fishing Club	S. Padre Is., TX