

A SUMMARY OF FISH TAGGING IN  
TEXAS BAYS: 1975-1988

by

Steven R. Marwitz



MANAGEMENT DATA SERIES

No. 1

1989

**Texas Parks and Wildlife Department  
Fisheries Division  
4200 Smith School Road  
Austin, Texas 78744**

## ABSTRACT

During November 1975-December 1988 76,404 fish (40 species) were tagged in Texas marine waters. Red drum (Sciaenops ocellatus), spotted seatrout (Cynoscion nebulosus) and black drum (Pogonias cromis) constituted 34%, 25% and 21% of the total tagged, respectively. Overall, 8% of all fishes tagged were returned; red drum had the highest return rate of 15%. Of the 6,444 tagged fish returned, 72% were by sport fishermen, 22% by commercial fishermen and 4% by Texas Parks and Wildlife Department personnel. Of all tags returned, 82% came from the same bay system where the fishes were tagged. The National Marine Fisheries Service paid \$3,620 in rewards before 1979. The Gulf Coast Conservation Association paid \$9,789 in rewards during 1979-1988.

## INTRODUCTION

Fish tagging on the Texas coast began in 1950 as a cooperative study between the Copano Research Foundation and the Texas Game, Fish and Oyster Commission (Simmons 1976, Green 1986). These early tagging efforts were limited almost exclusively to Matagorda Bay southward. Important food and game fishes were marked with monel jaw tags, Peterson disc tags or floy tags and internal abdominal anchor tags with attached streamers. Nearly 74,000 fish were tagged and released between April 1950 and October 1975. Of these, 3,386 tags were returned (Green 1986). In November 1975, the Texas Parks and Wildlife Department (TPWD) expanded and intensified fish tagging efforts in seven bay systems (Figure 1) on the Texas coast (Marwitz 1986). East Matagorda Bay was added in October 1976 and Sabine Lake in January 1986.

The objectives of the ongoing tagging program are to obtain data needed to estimate movement, growth, mortality and population size of finfishes. Red drum (Sciaenops ocellatus), spotted seatrout (Cynoscion nebulosus), black drum (Pogonias cromis), sheepshead (Archosargus probatocephalus), southern flounder (Paralichthys lethostigma), and gulf flounder (P. albigutta) were primary species tagged; other species were tagged infrequently.

The present report summarizes fish tagging and tagged fish returns from November 1975 to December 1988. Differences in this report compared to previous reports are due to updating of the data base; the most recent report should be considered the most accurate.

## MATERIALS AND METHODS

The majority of tagged fish were collected from Sabine Lake, Galveston, East Matagorda, Matagorda, San Antonio, Aransas, Corpus Christi, upper and lower Laguna Madre bay systems during November 1975 to December 1988. Fish for tagging were obtained during TPWD routine and special sampling with rods and reels, gill nets, trammel nets, bag seines, beach seines, shrimp trawls, trotlines (Matlock and Weaver 1979, Hegen et al. 1984, McEachron and Green 1985, Meador et al. 1988, Dailey et al. 1988) and fish traps (TPWD unpublished data). Some stocked hatchery fish (Dailey 1988) and fish captured by electrofishing (TPWD unpublished data) were also tagged prior to being released into Texas bays. Uniquely numbered internal abdominal anchor tags with external streamers were surgically inserted into a fish's abdominal cavity. Only fish judged to be healthy were tagged using the technique described by Moffett (1961). Prior to release, date and location of capture and total length of each fish was recorded; weight was recorded until June 1981. Tags were made of semihard glossy blue, green or red-orange plastic (25.4 x 6.4 x 0.8 mm) with round corners. Bright yellow flexible plastic hollow tubing (about 50 mm long; O.D. = 2.1 mm; I.D. = 1.0 mm) extended from a single hole in the center of each tag. "Texas PWD, Rockport" or "Texas PWD Seabrook" was printed on each tag.

Posters were placed in commercial fish houses, fish camps and sporting goods stores and on fishing piers to publicize the tagging program. Information on the tagging program was presented on radio and television stations in cities adjacent to each bay system as well as in newspapers throughout Texas and in the TPWD magazine. Each fisherman reporting a

recaptured tagged fish was categorized as sport (did not sell fish), commercial (sold fish), or TPWD personnel (caught fish while performing official duties). If a tag was returned during a TPWD routine survey it was categorized as sport/survey (turned in during sport fisheries survey), commercial/survey (turned in during commercial fisheries survey) or unknown (information not available). For every 100 tags released there were two preselected \$25 rewards, five \$10 rewards, five \$5 rewards and 88 \$1 rewards. Rewards were paid by the National Marine Fisheries Service (NMFS) until November 1978 and by the Gulf Coast Conservation Association (GCCA) since December 1978. A reward was paid for each tag returned regardless of information given.

## RESULTS

In Texas marine waters, 76,404 fish (40 species) were tagged from November 1975 through December 1988 (Tables 1 and 2). Red drum, spotted seatrout, and black drum constituted 34%, 25% and 21% of the total tagged, respectively. An average 5,799 fish were tagged annually excluding 1975 (an incomplete year); annual number tagged ranged from 3,111 in 1984 to 10,221 in 1987. Number of fish tagged in each bay ranged from 112 in East Matagorda Bay in 1979 to 7,657 in Galveston Bay in 1987. In the Gulf of Mexico 384 fish were tagged.

Of all fishes tagged, 38% were caught in gill nets, 27% by rod and reel and 21% in trammel nets (Table 3). Other gears were used infrequently to capture fish for tagging.

Of 6,444 tags returned, sport fishermen returned 72%, commercial fishermen returned 22% and TPWD personnel returned 4% (Table 4). From 1975 through 1978 both sport and commercial fishermen each returned approximately 50% of all tags. By the end of 1982, sport fishermen returned 93% of the tags compared to slightly more than 4% for commercial fishermen. By 1988, commercial fishermen returns were <3%. Mean number of tags returned/year, excluding 1975 and 1988, was 520; the most being returned in 1980 (Tables 4 and 5). Tags returned in 1975 were not included in the mean number returned/year because only two months of data were collected; 1988 tags were not included because of insufficient time for tags to be returned.

Based on returned tags, 83% were returned from the same bay system in which the fish were tagged (Table 5). Intrabay recovery rates for red drum, spotted seatrout, black drum, sheepshead, southern flounder and gulf flounder were 84%, 84%, 78%, 61%, 77% and 88%, respectively. Movement of tagged fish from the original bay in which they were tagged was either into other bay systems (7%), into the Texas Territorial Sea (TTS) (5%) or into waters outside the TTS (<1%); 5% of the returns were not identifiable as to location of capture.

Overall, 8% of all fish tagged were returned. Red drum had highest return rate with 15% followed by spotted seatrout with 7%, southern flounder with 6%, black drum with 5%, gulf flounder with 4% and sheepshead with 3%.

Total monetary rewards paid for returned tags were \$13,409 (Table 6). There were 5,719 \$1 rewards, 299 \$5 rewards, 297 \$10 rewards and 129 \$25 rewards. Mean annual reward payment, excluding 1975 and 1988, was \$1,087; the greatest amount was paid in 1980 (\$1,853) and the least amount in 1985 (\$517). The National Marine Fisheries Service paid \$3,620 in rewards before 1979. The Gulf Coast Conservation Association paid \$9,789 in rewards during 1979-1988.

#### DISCUSSION

The 15% recovery rate for red drum exceeded the 12% reported by Matlock and Weaver (1979) and the 6-13% reported by Simmons and Breuer (1962); it was lower than the 20% reported by Marwitz (1986) and the 35-46% reported from Florida tagging programs conducted during 1962-1964 (Beaumariage 1964, Beaumariage and Wittich 1966). The 7% spotted seatrout recovery rate was similar to that reported by Marwitz (1986) and was lower than the 9% reported by Vogelbein and Overstreet (1987), 9% reported by McEachron and Matlock (1980) and the 16% reported in Florida by Beaumariage (1964). The 5% black drum recovery rate is higher than the 3% reported by Matlock and Weaver (1979) and the 0-4% rate reported by Simmons and Breuer (1962) but is lower than the 7% reported by Marwitz (1986); recovery rates of 25-49% (Beaumariage 1964, Beaumariage and Wittich 1966) from the 1962-1964 Florida tagging program exceed the Texas rates. The 3% recovery rate for sheepshead was similar to that reported by Marwitz (1986) and Matlock and Weaver (1979). The 6% recovery rate for southern flounder was between the 8% reported by Marwitz (1986) and the 4% reported by Matlock and Weaver (1979). The 4% recovery rate for gulf flounder was similar to that reported by Marwitz (1986); it was lower than the 9% reported by Matlock and Weaver (1979).

The high Florida recovery rates may have been influenced by extensive publicity and payment of high monetary rewards (Matlock and Weaver 1979). When rewards as high as \$10,000 were offered to Florida anglers, they returned over 50% of the tagged red drum released (Beaumariage 1969). Excessive rewards may result in biased estimates of exploitation rates or population sizes if anglers actively seek tagged fish or have privileged knowledge of when and where fish were released (Matlock 1981).

Rawston (1971) and Matlock (1981) reported monetary rewards increase reporting rates. Rewards paid by the NMFS and GCCA probably enhanced recovery rates. Visibility of tags is important to fishermen reporting recaptured tagged fish (Green and Matlock 1983). They found angler reporting rates in Texas were 35% for red drum, 33% for spotted seatrout, 17% for black drum, 15% for sheepshead and 31% for flounder. Interviews with anglers that returned tags revealed 50% knew a reward would be paid (Matlock 1981), but 78% of the anglers who had not returned "surreptitiously implanted" tags reported they did not find tags. These results suggest recovery rates could be increased by offering higher rewards, increasing public awareness and by making tags more visible (Matlock 1981).

Few tags are returned by commercial fishermen. Beginning in 1978, the recovery rate from commercial fishermen began declining until it reached a low in 1983. The decline may be attributed to commercial fishermen opposition to state laws and Texas Parks and Wildlife Commission regulations restricting

commercial fishing activities. Statutory and regulatory changes that may have contributed to the decline in recovery rates were the prohibition of the use of nets and trotlines on weekends during 1977, the requirement of reporting individual commercial finfish fishermen harvest during 1978, the establishment of commercial red drum harvest quotas (Anonymous 1979, 1981), the prohibition of sale of native red drum and spotted seatrout (Anonymous 1983) and the prohibition of netting on Texas coastal waters (Anonymous 1989). Commercial fishermen have stated at public hearings and during TPWD commercial surveys that they would no longer return TPWD fish tags as a protest to the regulations (Marwitz 1986).

Most recaptured fish were caught in the bay in which they were tagged. This corresponds to previous findings (Matlock and Weaver 1979, Osburn et al 1982, Osburn and Matlock 1984, Marwitz 1986). This is important for management. Bay specific size and bag limits may be appropriate for selected species. Additionally, the stocking of genetically different populations of the same species can be done discretely to protect the integrity of previously existing gene pools. For fishery managers it can be reassuring to know that a genetically different stocked fish will generally remain in a defined stocking area in order to determine stocking effects.

Tagging results presented in this report can be used to determine growth, mortality and population size, as well as to further define species movement and to improve the efficiency of the TPWD tagging program. Annual updates are needed to assess changes in finfish populations in Texas.

## LITERATURE CITED

- Anonymous. 1979. Saltwater finfish research and management in Texas. A report to the Governor and the 66th Legislature. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Anonymous. 1981. Saltwater finfish research and management in Texas. A report to the Governor and the 67th Legislature. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Anonymous. 1983. Saltwater finfish research and management in Texas. A report to the Governor and the 68th Legislature. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Anonymous. 1989. Saltwater finfish research and management in Texas. A report to the Governor and the 71th Legislature. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Beaumariage, D. S. 1964. Returns from the 1963 Schlitz tagging program. Technical Series Number 43. Florida Board of Conservation. St. Petersburg, Florida.
- Beaumariage, D. S. 1969. Returns from the 1965 Schlitz tagging program including a cumulative analysis of previous results. Technical Series Number 59. Florida Department of Natural Resources Marine Research Lab. St. Petersburg, Florida.
- Beaumariage, D. S., and A. L. Wittich. 1966. Returns from the 1964 Schlitz tagging program. Technical Series Number 47. Florida Board of Conservation. St. Petersburg, Florida.
- Dailey, J. A. 1988. Fish stocking in Texas bays: 1975-1987. Management Data Series Number 147. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Dailey, J. A., P. C. Hammerschmidt, and L. W. McEachron. 1988. Trends in relative abundance and size of selected finfishes in Texas bays: November 1975-December 1987. Management Data Series Number 155. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Green, L. M. 1986. Fish tagging on the Texas coast. Management Data Series Number 99. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Green, A. W., and G. C. Matlock. 1983. A method of directly estimating the tag-reporting rate of anglers. Transactions of the American Fisheries Society. 112:412-415.
- Hegen, H. E., G. E. Saul, and G. C. Matlock. 1984. Survival of handled and tagged spotted seatrout held in wood and wire cages. Management Data Series Number 61. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.

- Marwitz, S. R. 1986. Summary of fish tagging in Texas bays, 1975-1982. Management Data Series Number 66. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Matlock, G. C. 1981. Nonreporting of recaptured tagged fish by saltwater recreational boat anglers in Texas. Transactions of the American Fisheries Society. 110:90-92.
- Matlock, G. C., and J. E. Weaver. 1979. Fish tagging in Texas bays during November 1975-September 1976. Management Data Series Number 1. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Meador, K. L., L. W. McEachron, and T. J. Cody. 1989. Trends in relative abundance of selected shellfishes and finfishes along the Texas coast: January 1977-December 1987. Management Data Series Number 153. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- McEachron, L. C., and G. C. Matlock. 1980. Movement of spotted seatrout (Cynoscion nebulosus) tagged in Bastrop Bayou. Annual Proceedings of the Texas Chapter, American Fisheries Society. 3:64-82.
- McEachron, L. W. and A. W. Green. 1985. Trends in relative abundance and size of selected finfishes along the Texas coast: November 1975-June 1984. Management Data Series Number 79. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Austin, Texas.
- Moffet, A. W. 1961. Movements and growth of spotted seatrout, Cynoscion nebulosus (Cuvier), in west Florida. Technical Series Number 36. Florida Board of Conservation. Miami, Florida.
- Osburn, H. R., G. C. Matlock, and A. W. Green. 1982. Red drum (Sciaenops ocellatus) movement in Texas bays. Contributions in Marine Science. 25:85-97.
- Osburn, H. R., and G. C. Matlock. 1984. Black drum movement in Texas bays. North American Journal of Fisheries Management. 4:523-530.
- Rawston, R. R. 1971. Nonreporting of tagged white catfish, largemouth bass, and bluegills by anglers at Folsom Lake, California. California Fish and Game. 57:246-252.
- Robins, R. C., and R. M. Bailey, C. E. Bond, J. R. Brooker, C. A. Lockner, R. N. Lea, and W. B. Scott. 1980. A list of common and scientific names of fishes from the United States and Canada. American Fisheries Society Special Publication Number 12. Bethesda, Maryland.
- Simmons, E. G. 1976. Fish tagging on the Texas coast. Texas Parks and Wildlife Department, Coastal Fisheries Branch. Project Report (1976):66-107. Austin, Texas.



Simmons, E. G., and J. P. Breuer. 1962. A Study of redbfish, (Sciaenops ocellata Linnaeus) and black drum (Pogonias cromis Linnaeus). Publications of the Institute of Marine Science. 8:184-211.

Texas Parks and Wildlife Department. Unpublished data. Coastal Fisheries Branch. Austin, Texas.

Vogelbein, K. L., and R. M. Overstreet. 1987. Histopathology of the internal anchor tag in spot and spotted seatrout. Transactions of the American Fisheries Society. 116:745-756.

Table 1. List of common and scientific names of species tagged in Texas bays during November 1975-December 1988<sup>a</sup>.

<u>Common name</u>	<u>Scientific name</u>
Alligator gar	<u>Lepisosteus spatula</u>
Atlantic croaker	<u>Micropogonias undulatus</u>
Atlantic spadefish	<u>Chaetodipterus faber</u>
Black drum	<u>Pogonias cromis</u>
Bluefish	<u>Pomatomus saltatrix</u>
Bonnethead	<u>Sphyrna tiburo</u>
Common snook	<u>Centropomus undecimalis</u>
Cravelle jack	<u>Caranx hippos</u>
Crested cusk-eel	<u>Ophidon welshi</u>
Fat snook	<u>Centropomus parallelus</u>
Flathead catfish	<u>Pylodictus olivaris</u>
Florida pompano	<u>Trachinotus carolinus</u>
Fringed flounder	<u>Etropus crossotus</u>
Hardhead catfish	<u>Arius felis</u>
Gafftopsail catfish	<u>Bagre marinus</u>
Gizzard shad	<u>Dorosoma cepedianum</u>
Greater amberjack	<u>Seriola dumerili</u>
Gulf flounder	<u>Paralichthys albigutta</u>
Gulf kingfish	<u>Menticirrhus littoralis</u>
Gulf menhaden	<u>Brevoortia patronus</u>
Ladyfish	<u>Elops saurus</u>
Lane snapper	<u>Lutjanus synagris</u>
Largemouth bass	<u>Micropterus salmoides</u>
Ocellated flounder	<u>Ancyclosetta quadrocellata</u>
Pigfish	<u>Orthopristis crysoptera</u>
Pinfish	<u>Lagodon rhomboides</u>
Red drum	<u>Sciaenops ocellatus</u>
Red snapper	<u>Lutjanus campechanus</u>
Sand seatrout	<u>Cynoscion arenarius</u>
Sheepshead	<u>Archosargus probatocephalus</u>
Southern flounder	<u>Paralichthys lethostigma</u>
Southern kingfish	<u>Menticirrhus americanus</u>
Spot	<u>Leiostomus xanthurus</u>
Spotted seatrout	<u>Cynoscion nebulosus</u>
Striped bass	<u>Morone saxatilis</u>
Striped mullet	<u>Mugil cephalus</u>
Tarpon	<u>Megalops atlanticus</u>
Tripletail	<u>Lobotes surinamensis</u>
White bass	<u>Morone chrysops</u>
Yellow bass	<u>Morone mississippiensis</u>

<sup>a</sup>Common and scientific names provided by Robins et al. (1980).

Table 2. Number of fishes tagged with internal abdominal anchor tags for each calendar year during November 1975-December 1988. Only years where fish were tagged are listed.

Bay	Year	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
Sabine Lake	1975	5	0	2	0	0	0	0	7	
	1976	5	0	8	0	0	0	0	13	
	1986	105	17	150	0	36	0	0	312	
	1987	92	5	90	0	36	0	1 <sup>b</sup>	208	
	1988	77	4	51	6	4	0	3 <sup>c</sup>	145	
	1975	80	0	47	8	2	0	0	137	
	1976	246	572	332	27	47	0	60 <sup>d</sup>	1,284	
	1977	152	65	192	13	41	0	0	463	
Galveston	1978	287	132	282	68	58	1	0	828	
	1979	260	227	173	37	33	1	0	731	
	1980	241	803	11	17	19	0	0	1,091	
	1981	126	762	109	25	14	0	0	1,036	
	1982	210	869	43	11	5	0	0	1,138	
	1983	1,513	697	94	11	3	0	8 <sup>a</sup>	2,326	
	1984	860	301	141	34	36	0	5 <sup>a</sup>	1,377	
	1985	1,423	301	218	20	47	0	40 <sup>e</sup>	2,049	
	1986	678	59	136	1	6	0	93 <sup>f</sup>	973	
	1987	252	51	199	0	37	0	7,118 <sup>g</sup>	7,657	
	1988	206	53	217	2	37	0	444 <sup>h</sup>		
	East Matagorda	1976	73	0	216	13	42	0	0	344
1977		69	0	143	78	65	0	0	355	
1978		79	0	96	56	22	0	0	253	
1979		53	0	45	4	10	0	0	112	
1980		102	0	47	30	2	0	0	181	
1981		37	327	27	13	4	0	0	408	
1982		83	453	106	27	11	0	0	680	
1983		102	605	110	95	8	0	0	920	
1984		108	35	63	33	17	0	0	256	
1985		42	0	76	25	3	0	0	146	
1986		792	0	44	33	38	0	0	907	
1987		487	0	65	2	14	0	0	568	
1988		91	1	80	12	17	0	4 <sup>i</sup>	205	
Matagorda		1975	74	0	29	0	11	0	0	114
		1976	462	1	323	36	58	2	3 <sup>j</sup>	885
		1977	539	0	480	81	28	1	1 <sup>k</sup>	1,130
	1978	522	217	267	79	27	0	0	1,112	
	1979	771	0	155	60	18	5	0	1,009	
	1980	285	0	63	10	8	0	0	366	
	1981	121	405	22	8	3	0	0	559	
	1982	72	633	67	10	4	0	0	786	
	1983	166	626	100	30	16	0	1 <sup>l</sup>	939	
	1984	46	305	60	33	3	0	4 <sup>l</sup>	451	
	1985	63	0	107	15	12	0	1 <sup>m</sup>	198	
	1986	200	0	133	35	24	0	0	392	
	1987	139	0	93	10	19	0	0	261	
	1988	118	1	98	14	12	0	0	243	

Table 2. (Cont'd.)

Bay	Year	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
San Antonio	1975	97	0	77	0	6	0	0	180	
	1976	532	0	185	95	40	17	3 <sup>n</sup>	872	
	1977	180	0	105	70	21	11	0	387	
	1978	261	66	101	40	40	0	1 <sup>o</sup>	509	
	1979	676	0	154	179	73	3	5 <sup>o</sup>	1,090	
	1980	278	0	179	80	14	1	1 <sup>p</sup>	553	
	1981	143	343	132	128	19	4	0	769	
	1982	50	637	47	2	4	0	0	740	
	1983	60	616	51	3	26	0	0	756	
	1984	83	23	28	3	28	1	0	166	
	1985	62	0	64	11	45	0	0	182	
	1986	169	0	65	5	48	0	1 <sup>a</sup>	288	
	1987	212	42	127	8	44	0	1 <sup>r</sup>	434	
	1988	156	6	112	14	7	4	0	299	
	Arkansas	1975	36	0	61	0	3	0	0	100
		1976	344	23	415	240	38	7	28 <sup>s</sup>	1,095
		1977	147	0	135	38	28	2	0	350
		1978	409	73	238	110	33	8	0	871
1979		443	164	226	157	46	6	1 <sup>t</sup>	1,043	
1980		1,194	219	188	98	51	0	4 <sup>a</sup>	1,754	
1981		691	703	149	104	44	4	0	1,695	
1982		296	760	297	70	50	2	0	1,475	
1983		131	686	209	49	30	0	0	1,105	
1984		63	34	74	24	36	2	0	233	
1985		122	9	61	12	31	0	280 <sup>t</sup>	515	
1986		127	2	87	4	14	1	0	235	
1987		79	4	79	3	7	0	1 <sup>u</sup>	170	
1988		90	11	97	3	10	2	0	213	
Corpus Christi		1975	60	0	54	28	39	8	2 <sup>a</sup>	191
		1976	155	18	135	131	46	36	75 <sup>v</sup>	596
		1977	225	1	77	55	29	7	4 <sup>w</sup>	398
		1978	268	10	108	127	43	17	3 <sup>x</sup>	576
	1979	337	106	113	98	53	13	283 <sup>y</sup>	1,003	
	1980	307	160	49	29	26	0	2 <sup>z</sup>	573	
	1981	190	445	106	7	12	0	0	760	
	1982	96	673	64	3	3	0	0	839	
	1983	46	632	113	0	8	0	0	799	
	1984	80	36	113	11	24	3	0	267	
	1985	142	18	39	27	29	7	0	262	
	1986	124	49	115	8	41	8	0	345	
	1987	113	70	85	7	19	10	0	304	
	1988	119	20	190	10	17	9	0	365	
	Upper Laguna Madre	1975	31	0	129	0	6	0	0	166
		1976	121	8	248	7	3	6	42 <sup>aa</sup>	435
		1977	65	3	102	5	0	0	0	175
		1978	94	27	1,463	0	15	0	0	1,599
1979		113	49	96	0	2	0	0	260	
1980		203	44	124	22	8	0	0	401	
1981		92	353	142	0	7	0	0	594	
1982	66	624	78	0	17	0	0	785		

Table 2. (Cont'd.)

Bay	Year	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
Lower Laguna Madre	1983	40	602	41	0	12	0	0	695
	1984	86	0	85	0	2	0	0	173
	1985	201	9	241	0	24	0	8 <sup>a</sup>	483
	1986	51	4	208	1	21	0	0	285
	1987	77	4	208	0	3	0	0 <sup>bb</sup>	292
	1988	73	1	285	3	5	0	2 <sup>bb</sup>	369
	1975	32	0	72	0	13	0	0	117
	1976	198	16	209	20	19	1	182 <sup>cc</sup>	645
	1977	139	2	285	10	11	0	0	447
	1978	421	174	481	242	31	4	2 <sup>dd</sup>	1,355
1979	183	57	140	75	21	4	21 <sup>a</sup>	501	
1980	218	53	90	8	6	3	0	378	
1981	298	467	54	10	4	1	2 <sup>a</sup>	836	
1982	185	637	38	0	3	0	0	863	
1983	96	612	7	0	5	0	3 <sup>ee</sup>	723	
1984	160	21	7	0	0	0	0	188	
1985	349	11	153	0	1	0	1 <sup>t</sup>	515	
1986	133	0	163	1	23	0	1 <sup>t</sup>	321	
1987	82	3	168	2	20	0	5 <sup>ff</sup>	280	
1988	109	2	145	1	6	1	0	264	
Gulf of Mexico off Sabine Lake	1987	0	2	2	0	1	0	2 <sup>gg</sup>	7
	1988	3	41	8	1	2	0	47 <sup>hh</sup>	102
Gulf of Mexico off Galveston Bay	1976	9	0	0	0	0	0	0	9
	1977	8	0	0	0	0	0	0	8
	1988	2	59	6	1	7	0	28 <sup>ii</sup>	103
Gulf of Mexico off Matagorda-San Antonio-Aransas Bays	1981	7	0	0	0	0	0	0	7
	1982	3	0	0	0	0	0	0	3
	1987	4	11	8	0	0	0	3 <sup>jj</sup>	26
	1988	7	50	9	1	0	0	7 <sup>kk</sup>	74
Gulf of Mexico off Corpus Christi -Upper Laguna Madre Bays	1987	0	5	3	0	2	0	0 <sup>kk</sup>	10
	1988	1	8	5	1	0	0	9 <sup>kk</sup>	24
Gulf of Mexico off Upper and Lower Laguna Madre Bays	1988	0	6	1	1	0	0	3 <sup>ll</sup>	11
	1975	415	0	471	36	80	8	2	1,012
Coastwide	1976	2,145	638	2,071	569	293	69	393	6,178
	1977	1,524	71	1,519	350	223	21	5	3,713
	1978	2,341	699	3,036	722	269	30	6	7,103
	1979	2,836	603	1,102	610	256	32	310	5,749
	1980	2,828	1,279	751	294	134	4	7	5,297
	1981	1,705	3,805	741	295	107	9	2	6,664
	1982	1,061	5,286	740	123	97	2	0	7,309
	1983	2,154	5,076	725	188	108	0	12	8,263

Table 2. (Cont'd.)

Year	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1984	1,486	755	571	138	146	6	9	3,111
1985	2,404	348	959	110	192	7	330	4,350
1986	2,379	131	1,101	88	251	9	99	4,058
1987	1,537	200	1,127	33	183	10	7,131	10,221
1988	1,052	263	1,304	70	124	16	547	3,376
Grand Total	25,867	19,154	16,218	3,626	2,463	223	8,853	76,404

<sup>a</sup>Atlantic croaker.  
<sup>b</sup>Yellow bass.  
<sup>c</sup>Atlantic croaker (1) and gafftopsail catfish (2).  
<sup>d</sup>Atlantic croaker (46), gizzard shad (2), spot (1), hardhead catfish (6), striped mullet (4) and tripletail (1).  
<sup>e</sup>Tarpon (1) and striped bass (39).  
<sup>f</sup>Tarpon (2) and striped bass (91).  
<sup>g</sup>Striped bass (7,108) and bluefish (10).  
<sup>h</sup>Striped bass (436), Atlantic croaker (7) and gizzard shad (1).  
<sup>i</sup>Hardhead catfish.  
<sup>j</sup>Hardhead catfish (1) and southern kingfish (2).  
<sup>k</sup>Crevalle jack.  
<sup>l</sup>Striped bass.  
<sup>m</sup>Crested cusk-eel.  
<sup>n</sup>Florida pompano (1) and Atlantic croaker (2).  
<sup>o</sup>White bass.  
<sup>p</sup>Largemouth bass.  
<sup>q</sup>Florida pompano.  
<sup>r</sup>Flathead catfish.  
<sup>s</sup>Gizzard shad (1), Gulf menhaden (3), spot (9), hardhead catfish (3), striped mullet (10) and alligator gar (2).  
<sup>t</sup>Common snook.  
<sup>u</sup>Tarpon.  
<sup>v</sup>Atlantic croaker (52), spot (7), hardhead catfish (8) and striped mullet (8).  
<sup>w</sup>Atlantic croaker (1), bonnethead (2) and ocellated flounder (1).  
<sup>x</sup>Ocellated flounder.  
<sup>y</sup>Atlantic croaker (9), gizzard shad (1), crevalle jack (2), lane snapper (2), southern kingfish (1), red snapper (265) and greater amberjack (3).  
<sup>z</sup>Atlantic croaker (1) and sand seatrout (1).  
<sup>aa</sup>Atlantic croaker (28), hardhead catfish (8), striped mullet (4) and pinfish (2).  
<sup>bb</sup>Atlantic croaker (1) and atlantic spadefish (1).  
<sup>cc</sup>Atlantic croaker (57), spot (40), hardhead catfish (25), striped mullet (54), pinfish (3) and pigfish (3).  
<sup>dd</sup>Crevalle jack.  
<sup>ee</sup>Ladyfish (2) and common snook (1).  
<sup>ff</sup>Common snook (4) and fat snook (1).  
<sup>gg</sup>Atlantic croaker (1) and sand seatrout (1).  
<sup>hh</sup>Atlantic croaker (25), spot (16), bluefish (1), Florida pompano (3) and sand seatrout (2).  
<sup>ii</sup>Atlantic croaker (10), spot (11) and sand seatrout (7).  
<sup>jj</sup>Gulf kingfish (3).  
<sup>kk</sup>Gulf kingfish (9).  
<sup>ll</sup>Fat snook (1), spot (1) and Florida pompano (1).

Table 3. Number of fishes tagged with internal abdominal anchor tags, by capture gear for each calendar year during November 1975-December 1988. Only years where fish were tagged are listed.

Bay	Year	Gear <sup>a</sup>	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other <sup>b</sup> species	All species
Sabine Lake	1975	GN	5	0	2	0	0	0	0	7
	1976	GN	5	0	8	0	0	0	0	13
	1986	GN	105	17	148	0	36	0	4	310
		ST	0	0	2	0	0	0	0	2
	1987	GN	91	5	89	0	20	0	1	206
		ST	0	0	1	0	0	0	0	1
		BS	1	0	0	0	0	0	0	1
	1988	GN	77	4	47	0	4	0	3	135
		ST	0	0	4	6	0	0	0	10
	Galveston	1975	GN	80	0	47	8	2	0	0
1976		GN	111	3	64	9	8	0	14	209
		TN	134	0	268	18	38	0	46	504
1977		RR	1	569	0	0	1	0	0	571
		GN	74	0	81	8	8	0	0	171
		TN	78	0	111	5	33	0	0	227
		RR	0	65	0	0	0	0	0	65
1978		GN	48	0	87	6	8	0	0	149
		TN	238	4	195	60	47	1	0	545
		BS	1	0	0	2	0	0	0	3
		RR	0	128	0	0	3	0	0	131
1979		GN	91	0	7	7	6	0	0	111
		TN	169	5	166	30	27	1	0	398
1980		RR	0	222	0	0	0	0	0	222
		GN	23	0	8	8	1	0	0	40
		TN	207	0	3	9	17	0	0	236
		RR	11	803	0	0	1	0	0	815
1981		GN	59	1	106	6	6	0	0	178
		TN	54	0	3	19	8	0	0	84
1982		BS	1	0	0	0	0	0	0	1
	RR	12	761	0	0	0	0	0	773	
	GN	142	0	43	11	5	0	0	201	
	RR	68	869	0	0	0	0	0	937	
1983	GN	57	1	87	11	2	0	0	158	
	BS	0	0	0	0	0	0	8	8	
1984	RR	1,456	696	7	0	1	0	0	2,160	
	GN	123	32	138	34	11	0	5	343	
	RR	737	269	3	0	25	0	0	1,034	
	GN	180	34	201	20	21	0	1	457	
1985	RR	1,243	267	17	0	26	0	39	1,592	
	GN	344	14	129	1	6	0	4	498	
1986	RR	334	45	7	0	0	0	2	388	
	EF	0	0	0	0	0	0	87	87	
	GN	183	51	199	0	37	0	0	470	
	RR	69	0	0	0	0	0	0	69	
1987	EF	0	0	0	0	0	0	341	341	
	SK	0	0	0	0	0	0	6,777	6,777	
	GN	159	53	217	2	37	0	8	476	
	RR	47	0	0	0	0	0	1	48	
1988	EF	0	0	0	0	0	0	435	435	

Table 3. (Cont'd.)

Bay	Year	Gear <sup>a</sup>	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other <sup>b</sup> species	All species	
East Matagorda	1976	GN	23	0	19	5	26	0	0	73	
	1977	TN	50	0	197	8	16	0	0	271	
	1978	GN	19	0	95	74	29	0	0	0	248
		TN	48	0	36	4	36	0	0	0	107
	1979	GN	79	0	96	56	22	0	0	0	253
		TN	53	0	45	4	10	0	0	0	112
	1980	GN	102	0	47	30	2	0	0	0	181
		TN	35	0	27	13	4	0	0	0	79
	1982	RR	2	327	0	0	0	0	0	0	329
		GN	83	2	106	27	11	0	0	0	229
	1983	RR	0	451	0	0	0	0	0	0	451
		GN	68	0	106	94	8	0	0	0	276
	1984	RR	34	605	4	1	0	0	0	0	644
		GN	101	0	63	33	17	0	0	0	214
	1985	RR	7	35	0	0	0	0	0	0	42
		GN	42	0	76	25	3	0	0	0	146
	1986	GN	109	0	44	33	34	0	0	0	220
		BS	0	0	0	0	4	0	0	0	4
	1987	SK	683	0	0	0	0	0	0	0	683
		GN	74	0	65	2	13	0	0	0	154
1988	BS	0	0	0	0	1	0	0	0	1	
	SK	413	0	0	0	0	0	0	0	413	
		GN	91	1	80	12	17	0	4	205	
Matagorda	1975	GN	74	0	29	0	11	0	0	114	
	1976	GN	247	1	239	23	10	0	1	521	
	1977	TN	215	0	84	13	48	2	2	364	
		GN	149	0	215	29	9	0	1	403	
	1978	TN	390	0	265	52	19	1	0	727	
		GN	65	0	31	6	7	0	0	109	
	1979	TN	457	0	236	73	20	0	0	786	
		RR	0	217	0	0	0	0	0	217	
	1980	GN	265	0	65	4	0	0	0	334	
		TN	506	0	90	56	18	5	0	675	
	1981	GN	42	0	1	0	0	0	0	43	
		TN	243	0	62	10	8	0	0	323	
	1982	UK	1	0	0	0	0	0	0	1	
		GN	48	0	4	0	1	0	0	53	
	1983	TN	66	0	14	7	2	0	0	89	
		RR	6	405	4	1	0	0	0	416	
	1984	GN	71	0	67	10	4	0	0	152	
		RR	1	633	0	0	0	0	0	634	
	1985	GN	166	0	100	30	16	0	1	313	
		RR	0	626	0	0	0	0	0	626	
1986	GN	43	0	60	33	3	0	0	139		
	RR	3	305	0	0	0	0	0	308		
1987	SK	0	0	0	0	0	0	4	4		
	GN	63	0	107	15	12	0	1	198		
1988	GN	200	0	133	35	22	0	0	390		
	ST	0	0	0	0	1	0	0	1		
1989	BS	0	0	0	0	1	0	0	1		
	GN	139	0	93	10	18	0	0	260		
		BS	0	0	0	0	1	0	1		



Table 3. (Cont'd.)

Bay	Year	Gear <sup>a</sup>	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other <sup>b</sup> species	All species
San Antonio	1988	GN	97	1	98	14	12	0	0	222
		BS	1	0	0	0	0	0	0	1
		SK	20	0	0	0	0	0	0	20
	1975	GN	97	0	77	0	6	0	0	180
	1976	GN	233	0	138	44	29	9	2	455
		TN	299	0	47	51	11	8	1	417
	1977	GN	73	0	48	5	3	2	0	131
		TN	107	0	57	65	18	9	0	256
	1978	GN	52	0	16	6	8	0	1	83
		TN	209	0	85	34	32	0	0	360
		RR	0	66	0	0	0	0	0	66
	1979	UK	1	0	0	0	0	0	0	1
		GN	285	0	106	89	50	2	0	532
		TN	390	0	48	90	23	1	5	557
	1980	GN	139	0	118	54	9	1	1	322
		TN	139	0	61	26	5	0	0	231
	1981	GN	85	0	110	123	17	3	0	338
		TN	56	0	19	5	2	1	0	83
		RR	2	343	4	0	0	0	0	348
	1982	GN	50	0	47	2	2	0	0	101
		RR	0	637	0	0	2	0	0	639
	1983	GN	60	0	51	3	26	0	0	140
	RR	0	616	0	0	0	0	0	616	
1984	GN	56	0	25	3	23	1	0	108	
	DS	22	8	3	0	1	0	0	34	
	RR	5	15	0	0	4	0	0	24	
1985	GN	62	0	64	11	45	0	0	182	
1986	GN	169	0	65	5	47	0	1	287	
	ST	0	0	0	0	1	0	0	1	
1987	GN	212	42	127	8	44	0	1	434	
1988	GN	156	6	112	14	6	4	0	298	
	BS	0	0	0	0	1	0	0	1	
Arkansas	1975	GN	36	0	61	0	3	0	0	100
	1976	GN	178	1	299	220	24	7	5	734
		TN	166	22	116	20	14	0	23	361
	1977	GN	53	0	103	10	10	2	0	178
		TN	94	0	32	28	18	0	0	172
	1978	GN	51	0	40	25	7	0	0	123
		TN	355	33	185	85	26	8	0	692
		BS	0	0	12	0	0	0	0	12
	1978	TL	3	0	1	0	0	0	0	4
		RR	0	40	0	0	0	0	0	40
	1979	GN	132	3	87	86	26	4	1	339
		TN	306	68	138	70	20	2	0	604
		RR	5	93	1	1	0	0	0	100
	1980	UK	3	0	3	0	1	0	0	7
		GN	167	16	90	47	21	0	2	343
		TN	1,022	190	95	49	28	0	2	1,386
	BS	2	0	0	2	1	0	0	5	
	RR	0	13	0	0	0	0	0	13	

Table 3. (Cont'd.)

Year	Gear <sup>a</sup>	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other <sup>b</sup> species	All species
1981	GN	226	23	101	60	24	2	0	436
	TN	461	216	47	38	20	1	0	783
	BS	3	0	1	3	0	0	0	7
1982	RR	1	464	0	3	0	1	0	469
	GN	244	107	282	62	43	2	0	740
	TN	10	27	0	0	2	0	0	39
1983	BS	1	0	1	1	2	0	0	5
	RR	41	626	14	7	3	0	0	691
	GN	121	43	207	43	27	0	0	441
1984	TN	6	0	0	0	0	0	0	6
	BS	1	0	0	1	0	0	0	2
	RR	3	643	2	5	3	0	0	656
1985	GN	62	15	74	22	36	2	0	211
	BS	0	0	0	1	0	0	0	1
	RR	1	19	0	1	0	0	0	21
1986	GN	122	9	61	12	28	0	0	232
	BS	0	0	0	0	3	0	0	3
	SK	0	0	0	0	0	0	280	280
1987	GN	127	2	87	4	14	1	0	235
	GN	79	4	79	4	3	0	1	170
	GN	90	10	96	3	10	2	0	211
1975	BS	0	0	1	0	0	0	0	1
	UK	0	1	0	0	0	0	0	1
	GN	60	0	54	28	39	8	2	191
1976	GN	117	1	99	112	41	25	8	403
	TN	38	17	36	19	5	11	67	193
	GN	71	1	51	16	16	1	2	176
1977	TN	154	0	26	21	13	6	2	222
	GN	42	0	20	32	16	1	0	111
	TN	226	6	88	95	27	16	3	461
1978	RR	0	4	0	0	0	0	0	4
	GN	45	1	45	42	17	2	3	155
	TN	289	89	68	56	36	11	10	559
1979	BS	2	0	0	0	0	0	0	2
	RR	1	16	0	0	0	0	0	17
	FT	0	0	0	0	0	0	270	270
1980	GN	79	5	38	19	10	0	0	151
	TN	222	147	11	10	16	0	0	406
	RR	6	8	0	0	0	0	2	16
1981	GN	87	26	97	0	8	0	0	218
	TN	100	128	9	7	3	0	0	247
	RR	3	291	0	0	1	0	0	295
1982	GN	84	10	64	1	3	0	0	162
	RR	12	663	0	2	0	0	0	677
	GN	35	10	113	0	8	0	0	166
1983	RR	11	622	0	0	0	0	0	633
	GN	78	5	113	11	24	3	0	234
	RR	2	31	0	0	0	0	0	33
1984	GN	142	18	39	27	29	7	0	262
	GN	124	49	115	8	41	8	0	345
	GN	113	70	85	7	19	10	0	304
1985	GN	119	20	190	10	17	9	0	365



Table 3. (Cont'd.)

Bay	Year	Gear <sup>a</sup>	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other <sup>b</sup> species	All species
	1985	RR	4	21	0	0	0	0	0	25
		CN	137	1	77	0	1	0	1	217
		TL	212	10	76	0	0	0	0	298
	1986	CN	133	0	148	1	22	0	1	305
		BS	0	0	0	0	1	0	0	1
		TL	0	0	15	0	0	0	0	15
	1987	CN	82	3	168	2	19	0	5	279
		ST	0	0	0	0	1	0	1	1
	1988	CN	109	2	145	1	6	1	0	264
Gulf of Mexico off Sabine Lake	1987	DS	0	2	2	0	1	0	2	7
	1988	DS	3	41	8	1	2	0	47	102
Gulf of Mexico off Galveston Bay	1976	RR	9	0	0	0	0	0	0	9
	1977	RR	8	0	0	0	0	0	0	8
	1987	DS	0	3	0	0	1	0	0	4
	1988	DS	2	59	6	1	7	0	28	103
Gulf of Mexico off Matagorda-San Antonio-Aransas Bays	1981	RR	7	0	0	0	0	0	0	7
	1982	RR	3	0	0	0	0	0	0	3
	1987	BS	1	0	0	0	0	0	0	1
		DS	3	11	8	0	0	0	3	25
	1988	DS	7	49	9	1	0	0	7	73
		RS	0	1	0	0	0	0	0	1
Gulf of Mexico off Corpus Christi -Upper Laguna Madre Bays	1987	DS	0	5	3	0	2	0	0	10
	1988	DS	1	8	5	1	0	0	9	24
Gulf of Mexico off Upper and Lower Laguna Madre Bays	1988	DS	0	6	1	1	0	0	3	11
Coastwide	1975	CN	415	0	471	36	80	8	2	1,012
	1976	CN	1,078	6	1,301	437	147	43	109	3,121
		TN	1,057	63	770	132	145	26	284	2,477
		RR	10	569	0	0	1	0	0	580
	1977	CN	594	4	975	174	82	5	3	1,837
		TN	922	2	544	176	141	16	2	1,803
		RR	8	65	0	0	0	0	0	73
	1978	CN	495	6	1,870	199	80	3	1	2,654
		TN	1,777	209	1,000	459	178	27	5	3,655
		RR	0	467	0	0	3	0	0	470
		HS	1	0	12	2	0	0	0	15
		TL	68	17	154	62	8	0	0	309
	1979	CN	939	9	508	269	121	9	4	1,859
		TN	1,888	245	593	340	135	23	36	3,260
		RR	6	349	1	1	0	0	0	357
		HS	2	0	0	0	0	0	0	2
		FT	0	0	0	0	0	0	0	270
		UK	1	0	0	0	0	0	0	1

Table 3. (Cont'd.)

Year	Gear <sup>a</sup>	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other <sup>b</sup> species	All species
1980	GN	605	23	418	176	50	2	3	1,277
	TN	2,201	421	330	116	81	2	2	3,153
	RR	17	835	0	0	1	0	2	855
1981	BS	2	0	3	2	1	0	0	5
	UK	3	0	0	0	1	0	0	7
	GN	750	64	622	206	69	6	2	1,719
	TN	915	536	111	82	37	2	0	1,683
	RR	35	3,205	7	4	1	1	0	3,253
1982	BS	4	0	1	3	0	0	0	8
	UK	1	0	0	0	0	0	0	1
	GN	918	119	724	113	85	2	0	1,961
	TN	10	27	0	0	2	0	0	39
	RR	132	5,140	15	9	8	0	0	5,304
1983	BS	1	0	1	1	2	0	0	5
	GN	634	54	712	181	104	0	4	1,689
	TN	6	0	0	0	0	0	0	6
	RR	1,513	5,022	13	6	4	0	0	6,558
	BS	1	0	0	1	0	0	8	10
1984	GN	684 <sup>4</sup>	52	565	136	116	6	5	1,564
	RR	759	695	3	1	29	0	0	1,487
	BS	0	0	0	1	0	0	0	1
	TL	21	0	0	0	0	0	0	21
	SK	0	0	0	0	0	0	4	4
1985	DS	22	8	3	0	1	0	0	34
	GN	806	62	818	110	163	7	4	1,970
	RR	1,243	267	17	0	26	0	39	1,592
	BS	0	0	0	0	3	0	0	3
	TL	355	19	124	0	0	0	7	505
1986	SK	0	0	0	0	0	0	280	280
	GN	1,358	86	1,076	88	243	9	10	2,870
	RR	334	45	7	0	0	0	2	388
	BS	0	0	0	0	6	0	0	6
	TL	4	0	16	0	0	0	0	20
1987	SK	683	0	0	0	0	0	0	683
	ST	0	0	2	0	2	0	0	4
	EF	0	0	0	0	0	0	87	87
	GN	1,050	179	1,113	33	176	10	8	2,569
	RR	69	0	0	0	0	0	0	69
1988	BS	2	0	0	0	2	0	0	4
	SK	413	0	0	0	0	0	6,777	7,190
	ST	0	0	1	0	1	0	0	2
	EF	0	0	0	0	0	0	341	341
	DS	3	21	13	0	4	0	5	46
1988	GN	971	98	1,270	59	114	16	17	2,545
	ST	0	0	4	6	0	0	0	10
	RR	47	0	0	0	0	0	1	48
	EF	0	0	0	0	0	0	435	435
	BS	1	1	1	0	1	0	0	4
SK	20	0	0	0	0	0	0	20	

Table 3. (Cont'd.)

Bay	Year	Gear <sup>a</sup>	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other <sup>b</sup> species	All species
		UK	0	1	0	0	0	0	0	1
		DS	13	163	29	5	9	0	94	313
Grand Total			25,867	19,154	16,218	3,626	2,463	223	8,853	76,404

<sup>a</sup>BS = bag seine, DS = drag seine, EF = electrofishing, FT = fishtrap, GN = gill net, RR = rod and reel, ST = shrimp trawl, SK = stocked hatchery fish, TN = trammel net, TL = trotline and UK = unknown.

<sup>b</sup>List of other species captured can be found in footnote, Table 2.

Table 4. Number of fish tags returned by fishing category by bay system and calendar year during November 1975-December 1988. Only categories where returns occurred are listed.

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
Sabine Lake	1986	Sport	8	0	1	0	1	0	0	10
		Total	8	0	1	0	1	0	0	10
		Sport	11	0	6	0	1	0	0	0
1987	TPWD	3	0	0	0	0	0	0	0	3
	Total	14	0	6	0	1	0	0	0	21
1988	Sport	2	2	0	0	0	0	0	1	5
	Total	2	2	0	0	0	0	0	1 <sup>a</sup>	5
Galveston	Unknown	Sport	1	0	0	0	0	0	0	1
		TPWD	1	1	0	0	0	0	0	2
		Total	2	1	0	0	0	0	0	0
1975	Sport	2	0	0	0	0	0	0	0	2
	Total	2	0	0	0	0	0	0	0	2
1976	Sport	15	28	3	0	1	1	0	1	48
	Commercial	1	0	0	0	0	0	0	0	1
	TPWD	1	0	1	0	0	0	0	0	2
	Unknown	1	3	1	0	1	1	0	0	6
	Total	18	31	5	0	2	2	0	1 <sup>a</sup>	57
1977	Sport	12	20	4	0	1	1	0	0	37
	Commercial	0	0	2	0	0	0	0	0	2
	TPWD	2	0	0	0	0	0	0	0	2
	Total	14	20	6	0	1	1	0	0	42
1978	Sport	25	12	3	0	5	5	0	0	45
	Commercial	3	0	1	0	0	0	0	0	4
	Total	28	12	4	0	5	5	0	0	49
	Sport	23	5	1	1	4	4	0	0	34
1979	Commercial	4	1	1	0	1	1	0	0	7
	TPWD	1	0	0	0	0	0	0	0	1
	Unknown	2	0	1	0	0	0	0	0	3
	Total	30	6	3	1	5	5	0	0	45
1980	Sport	51	25	0	0	1	1	0	0	77
	Commercial	6	1	0	1	0	0	0	0	8
	TPWD	1	0	0	0	0	0	0	0	1
	Total	58	26	0	1	1	1	0	0	86
1981	Sport	13	67	3	0	0	0	0	0	83
	Commercial	0	2	0	0	0	0	0	0	2
	TPWD	1	1	0	0	0	0	0	0	2
	Total	14	70	3	0	0	0	0	0	87

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
	1982	Sport	29	107	0	0	1	0	0	137
		Commercial	2	1	0	0	0	0	0	3
		Total	31	108	0	0	1	0	0	140
	1983	Sport	58	67	1	0	0	0	1	127
		TPWD	10	0	0	0	0	0	0	10
		Total	68	67	1	0	0	0	0	137
	1984	Sport	52	28	0	0	0	0	0	80
		Commercial	1	0	0	0	0	0	0	1
		Unknown	1	0	0	0	0	0	0	1
Total	54	28	0	0	0	0	0	0	82	
	1985	Sport	69	10	1	1	3	0	3	87
		Commercial	1	0	1	0	1	0	0	3
		TPWD	2	0	1	0	0	0	0	3
Total	72	10	3	1	4	0	0	3 <sup>b</sup>	93	
	1986	Sport	100	10	0	0	0	0	1	111
		Commercial	4	0	1	0	0	0	0	5
		TPWD	5	0	0	0	0	0	0	5
Sport/survey	0	1	0	0	0	0	0	0	1	
Total	109	11	1	0	0	0	0	1 <sup>b</sup>	122	
	1987	Sport	52	5	6	0	5	0	0	68
		Commercial	4	0	0	0	0	0	0	4
		TPWD	2	0	0	0	0	0	0	2
Comm./survey	0	0	1	0	0	0	0	0	1	
Total	58	5	7	0	5	0	0	0	75	
	1988	Sport	25	2	1	0	1	0	10	39
		Commercial	1	0	1	0	0	0	0	2
		TPWD	0	0	0	0	0	0	0	1
Unknown	2	0	2	0	0	0	0	1	5	
Total	28	2	4	0	0	1	0	12 <sup>b</sup>	47	
East Matagorda	1976	Sport	5	0	1	0	0	0	0	6
		Commercial	7	0	5	0	0	0	0	12
		Unknown	1	0	0	0	0	0	0	1
Total	13	0	6	0	0	0	0	0	19	
	1977	Sport	13	0	4	0	5	0	0	22
		Commercial	9	0	19	0	2	0	0	30
		Unknown	0	0	4	1	0	0	0	5
Total	22	0	27	0	8	0	0	0	57	
	1978	Sport	5	0	7	0	2	0	0	14
		Commercial	5	0	8	1	1	0	0	15
		Unknown	1	0	0	0	0	0	0	1
total	11	0	15	1	3	0	0	0	30	



Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
	1979	Sport	3	0	4	0	2	0	0	9	
		Commercial	2	0	2	2	0	0	0	6	
		Total	5	0	6	2	2	0	0	15	
	1980	Sport	9	0	0	0	0	0	0	0	9
		Commercial	1	0	0	0	1	0	0	0	2
		Total	10	0	0	0	1	0	0	0	11
	1981	Sport	6	23	5	0	1	1	0	0	35
		Total	6	23	5	0	1	1	0	0	35
	1982	Sport	7	26	4	1	1	1	0	0	39
		TPWD	0	0	1	0	0	0	0	0	1
		Unknown	0	1	0	0	0	0	0	0	1
		Total	7	27	5	1	1	0	0	0	41
1983	Sport	7	37	1	0	0	0	0	0	45	
	Commercial	0	1	0	0	0	0	0	0	1	
	TPWD	0	1	0	0	0	0	0	0	1	
1984	Sport	11	6	1	0	0	0	0	0	18	
	TPWD	0	0	2	0	0	0	0	0	2	
	Total	11	6	3	0	0	0	0	0	20	
1985	Sport	2	2	1	2	2	0	0	0	7	
	Total	2	2	1	2	2	0	0	0	7	
1986	Sport	9	0	5	1	1	1	0	0	16	
	TPWD	1	0	0	0	0	0	0	0	1	
	Total	10	0	5	1	1	0	0	0	17	
1987	Sport	18	0	2	0	2	2	0	0	22	
	TPWD	1	0	0	1	0	0	0	0	2	
	Total	19	0	2	1	2	2	0	0	24	
1988	Sport	8	1	2	0	1	1	0	0	12	
	TPWD	2	0	1	0	0	0	0	0	3	
	Total	10	1	3	0	1	1	0	0	15	
Maragorda	Sport	0	0	1	0	0	0	0	0	1	
	TPWD	1	0	0	0	0	0	0	0	1	
	Total	1	0	1	0	0	0	0	0	2	
1975	Sport	1	0	0	0	0	0	0	0	1	
	Total	1	0	0	0	0	0	0	0	1	
1976	Sport	26	0	9	0	3	1	0	0	39	
	Commercial	16	0	6	0	0	0	0	0	22	
	TPWD	1	0	0	0	0	0	0	0	1	
	Unknown	1	0	0	0	0	0	0	0	1	
Total	Sport	44	0	15	0	3	1	0	0	63	
	Total	44	0	15	0	3	1	0	0	63	

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
	1977	Sport	63	0	15	1	3	0	0	82
		Commercial	14	0	12	0	0	0	0	26
		TPWD	3	0	3	0	0	0	0	6
		Unknown	5	0	3	0	0	0	0	8
		Total	85	0	33	1	3	0	0	122
	1978	Sport	88	11	24	0	2	0	0	125
		Commercial	35	0	15	1	0	0	0	51
		TPWD	13	0	5	0	0	0	0	18
		Unknown	10	0	7	0	0	0	0	17
		Total	146	11	51	1	2	0	0	211
	1979	Sport	92	5	8	1	1	0	0	107
		Commercial	18	0	9	0	0	0	0	27
		TPWD	6	1	1	0	0	0	0	8
		Unknown	0	0	0	0	1	0	0	1
		Total	116	6	18	1	2	0	0	143
	1980	Sport	100	1	2	1	0	0	0	104
		Commercial	6	0	2	0	0	0	0	8
		Unknown	1	0	1	0	0	0	0	2
		Total	107	1	5	1	0	0	0	114
	1981	Sport	40	23	1	1	0	0	0	65
		Commercial	2	0	0	0	0	0	0	2
		TPWD	4	0	0	0	0	0	0	4
		Total	46	23	1	1	0	0	0	71
	1982	Sport	18	46	1	0	0	0	0	65
		TPWD	0	1	1	0	0	0	0	1
		Unknown	0	1	0	0	0	0	0	1
		Total	18	47	2	0	0	0	0	67
	1983	Sport	10	41	1	0	0	0	0	52
		TPWD	1	0	0	0	0	0	0	1
		Total	11	41	1	0	0	0	0	53
	1984	Sport	11	37	4	0	1	0	0	53
		Unknown	1	1	0	0	0	0	0	2
		Total	12	38	4	0	1	0	0	55
	1985	Sport	8	10	6	1	1	0	0	26
		TPWD	0	0	1	0	0	0	0	1
		Sport/survey	1	0	0	0	0	0	0	1
		Total	9	10	7	1	1	0	0	28
	1986	Sport	25	2	1	1	1	0	0	30
		TPWD	0	0	1	0	0	0	0	1
		Total	25	2	1	2	1	0	0	31

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
San Antonio	1987	Sport	24	0	1	1	2	0	0	28	
		Total	24	0	1	1	2	0	0	28	
	1988	Sport	21	0	4	0	0	0	0	0	25
		Total	21	0	4	0	0	0	0	0	25
	Unknown	Sport	18	0	5	0	0	0	0	1	24
		Total	18	0	5	0	0	0	0	1 <sup>c</sup>	24
	1975	Sport	0	0	1	0	0	0	0	0	1
		Total	0	0	1	0	0	0	0	0	1
	1976	Sport	Commercial	23	0	1	2	0	2	0	28
			TPWD	13	0	1	1	0	0	0	15
		Unknown	Commercial	2	0	0	0	0	0	0	2
			TPWD	5	0	1	0	0	0	0	6
Total			43	0	3	3	0	2	0	51	
1977	Sport	Commercial	14	0	3	0	4	0	0	21	
		TPWD	34	0	10	0	1	0	0	45	
	Unknown	Commercial	5	0	2	0	0	0	0	7	
		TPWD	3	0	2	0	1	0	0	6	
		Total	56	0	17	0	6	0	0	79	
1978	Sport	Commercial	33	0	6	0	3	0	0	42	
		TPWD	23	0	6	0	0	0	0	29	
	Unknown	Commercial	4	0	0	0	0	0	0	4	
		TPWD	6	0	1	0	0	0	0	7	
		Total	66	0	13	0	3	0	0	82	
1979	Sport	Commercial	51	0	2	1	5	0	0	59	
		TPWD	28	0	3	1	1	0	0	33	
	Unknown	Commercial	5	0	1	1	0	0	0	7	
		Total	84	0	6	3	6	0	0	99	
1980	Sport	Commercial	42	0	3	2	2	0	0	49	
		TPWD	9	0	1	0	0	0	0	10	
	Unknown	Commercial	2	0	1	0	0	0	0	3	
		Total	53	0	5	2	2	0	0	62	
1981	Sport	Commercial	23	11	2	2	0	0	0	38	
		TPWD	1	0	0	0	0	0	0	1	
	Unknown	Commercial	2	0	1	0	0	0	0	3	
		Total	27	11	3	2	0	0	0	43	
1982	Sport	Commercial	8	15	3	4	0	0	0	30	
		TPWD	0	0	2	0	0	0	0	2	
	Unknown	Commercial	1	0	1	0	0	0	0	2	
		Total	9	15	6	4	0	0	0	34	

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
Aransas Bay	1983	Sport	5	36	0	2	0	0	0	43	
		TPWD	0	1	0	0	0	0	0	0	1
		Total	5	37	0	2	0	0	0	0	44
	1984	Sport	11	2	1	0	4	0	0	0	18
		Total	11	2	1	0	4	0	0	0	18
	1985	Sport	11	1	2	0	0	0	0	0	14
		TPWD	1	0	0	0	0	0	0	0	1
		Total	12	1	2	0	0	0	0	0	15
	1986	Sport	19	0	2	0	2	0	0	0	23
		Sport/survey	1	0	0	0	0	0	0	0	1
		Total	20	0	2	0	2	0	0	0	24
	1987	Sport	22	4	3	0	2	0	0	0	31
		Commercial	1	0	2	0	0	0	0	0	3
		TPWD	1	0	0	0	0	0	0	0	1
		Total	24	4	5	0	2	0	0	0	35
1988	Sport	14	1	3	0	0	0	1	0	19	
	TPWD	5	0	0	0	0	0	0	0	5	
	Total	19	1	3	0	0	0	1	0	24	
Unknown	Sport	1	0	0	0	0	0	0	0	1	
	TPWD	5	0	0	0	0	0	0	0	5	
	Total	7	0	0	0	0	0	0	0	8	
1976	Sport	35	0	17	4	1	0	0	0	57	
	Commercial	22	0	8	0	0	0	1	0	31	
	TPWD	0	0	0	0	0	0	0	2	2	
	Total	59	0	25	5	2	1	1	2 <sup>d</sup>	94	
1977	Sport	33	0	14	4	0	0	0	0	51	
	Commercial	16	1	12	1	0	0	0	0	30	
	TPWD	2	0	0	0	0	0	0	0	2	
	Total	52	1	27	5	0	0	0	0	85	
1978	Sport	57	2	7	5	3	0	0	0	74	
	Commercial	54	0	14	1	0	0	0	0	69	
	TPWD	1	0	2	0	0	0	0	0	3	
	Total	114	2	23	6	3	0	0	0	148	
1979	Sport	74	5	16	7	1	0	0	0	103	
	Commercial	51	1	6	0	0	0	0	0	58	
	TPWD	1	0	2	0	0	0	1	0	4	
	Total	126	6	24	7	1	0	1	0	165	

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
	1980	Sport	171	17	19	3	2	0	0	212
		Commercial	71	4	8	1	2	0	0	86
		TPWD	40	0	1	0	0	0	0	41
		Unknown	3	0	0	0	0	0	0	3
		Total	285	21	28	4	4	0	0	342
	1981	Sport	124	36	11	5	3	0	0	179
		Commercial	35	8	4	0	1	0	0	48
		TPWD	25	1	0	0	0	0	0	26
		Total	184	45	15	5	4	0	0	253
	1982	Sport	83	51	18	5	1	0	0	158
		Commercial	12	2	7	0	0	0	0	21
		TPWD	2	1	2	0	0	0	0	5
		Unknown	1	0	0	0	0	0	0	1
		Total	98	54	27	5	1	0	0	185
	1983	Sport	23	50	6	4	0	0	0	83
		Commercial	1	0	0	0	2	0	0	3
		TPWD	1	2	2	1	0	0	0	6
		Total	25	52	8	5	2	0	0	92
	1984	Sport	10	2	1	0	2	0	0	15
		Commercial	0	0	1	0	0	0	0	1
		TPWD	0	3	0	0	0	0	0	3
		Total	10	5	2	0	2	0	0	19
	1985	Sport	16	1	3	1	1	0	0	22
		TPWD	0	0	1	0	0	0	0	1
		Sport/survey	2	0	0	0	0	0	0	2
		Total	18	1	4	1	1	0	0	25
	1986	Sport	18	2	6	0	0	0	0	26
		Commercial	1	0	1	0	1	0	0	3
		TPWD	0	0	2	0	0	0	0	2
		Sport/survey	1	0	0	0	0	0	0	1
		Total	20	2	9	0	1	0	0	32
	1987	Sport	35	1	7	0	0	0	0	43
		Commercial	0	0	1	0	0	0	0	1
		Total	35	1	8	0	0	0	0	44
	1988	Sport	10	0	4	1	0	0	0	15
		Commercial	0	0	1	0	0	0	0	1
		Total	10	0	5	1	0	0	0	16
Corpus Christi	Unknown	Unknown Total	0	0	1	0	0	0	0	1
	1975	Commercial Total	0	0	1	0	0	0	0	1
		Commercial	1	0	0	0	1	0	0	2
		Total	1	0	0	0	1	0	0	2

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
	1976	Sport	7	0	1	1	2	0	0	11
		Commercial	17	0	2	1	0	0	0	20
		TPWD	1	0	0	0	0	0	0	1
		Unknown	3	0	0	0	0	0	0	3
		Total	28	0	3	2	2	0	0	35
	1977	Sport	32	0	2	2	2	0	0	38
		Commercial	15	2	6	3	1	0	0	27
		TPWD	1	0	0	1	0	0	1	3
		Unknown	0	0	1	0	0	0	0	1
		Total	48	2	9	6	3	0	1 <sup>e</sup>	69
	1978	Sport	34	0	3	3	2	0	0	42
		Commercial	46	0	12	3	2	0	0	63
		TPWD	1	0	0	0	1	0	0	2
		Unknown	1	0	0	0	0	0	0	1
		Total	82	0	15	6	5	0	0	108
	1979	Sport	27	1	2	1	3	0	21	55
		Commercial	24	0	1	0	2	0	0	27
		TPWD	2	0	0	0	1	0	0	3
		Unknown	1	0	0	0	0	0	0	1
		Total	54	1	3	1	6	0	21 <sup>f</sup>	86
	1980	Sport	39	6	1	0	2	0	0	48
		Commercial	39	6	6	2	2	0	0	55
		TPWD	5	0	0	1	0	0	0	6
		Total	83	12	7	3	4	0	0	109
	1981	Sport	20	19	0	0	0	0	0	39
		Commercial	35	2	0	0	4	0	0	41
		TPWD	2	0	1	0	0	0	0	3
		Total	57	21	1	0	4	0	0	83
	1982	Sport	14	50	4	0	1	0	0	69
		Unknown	0	1	0	0	0	0	0	1
		Total	14	51	4	0	1	0	0	70
	1983	Sport	9	56	1	1	1	0	0	68
		Commercial	0	0	1	0	0	0	0	1
		TPWD	0	2	0	0	0	0	0	2
		Sport/survey	0	1	0	0	0	0	0	1
		Total	9	59	2	1	1	0	0	72
	1984	Sport	13	4	0	0	0	1	0	18
		Commercial	0	0	0	0	1	0	0	1
		Sport/survey	1	0	0	0	0	0	0	1
		Total	14	4	0	0	1	1	0	20
	1985	Sport	18	7	2	1	3	0	0	31
		TPWD	1	0	0	0	0	0	0	1
		Total	19	7	2	1	3	0	0	32

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
Upper Laguna Madre	1986	Sport	15	2	2	1	1	0	0	21	
		Commercial	0	0	0	0	1	0	0	1	
		Total	15	2	2	1	2	0	0	22	
	1987	Sport	12	4	2	1	1	0	0	0	20
		Commercial	0	0	1	0	0	0	0	0	1
		Total	12	4	3	1	1	0	0	0	21
	1988	Sport	9	1	1	0	0	0	0	0	11
		Commercial	0	0	1	0	0	0	0	0	1
		Total	9	1	2	0	0	0	0	0	12
	1975	Commercial	0	0	0	0	1	0	0	0	1
		Total	0	0	0	0	1	0	0	0	1
	1976	Sport	10	0	2	0	1	0	0	0	13
Commercial		13	0	4	0	0	0	0	1	18	
Unknown		1	0	0	0	0	0	0	0	1	
Total		24	0	6	0	1	0	0	1 <sup>e</sup>	32	
1977	Sport	7	0	2	0	0	0	0	0	9	
	Commercial	21	0	14	0	0	0	0	0	35	
	TPWD	1	0	0	0	0	0	0	0	1	
1978	Total	29	0	16	0	0	0	0	0	45	
	Sport	8	0	9	0	1	0	0	0	18	
	Commercial	15	3	18	0	0	0	0	0	36	
	Unknown	0	0	1	0	0	0	0	0	1	
1979	Total	23	3	28	0	1	0	0	0	55	
	Sport	5	1	7	0	0	0	0	0	13	
	Commercial	17	1	59	0	1	0	0	0	78	
	TPWD	1	0	0	0	0	0	0	0	1	
1980	Unknown	1	0	1	0	0	0	0	0	2	
	Total	24	2	67	0	1	0	0	0	94	
	Sport	17	0	4	0	2	0	0	0	23	
	Commercial	19	1	25	0	0	0	0	0	45	
1981	TPWD	3	0	0	0	0	0	0	0	3	
	Unknown	0	0	1	0	0	0	0	0	1	
	Total	39	1	30	0	2	0	0	0	72	
	Sport	15	12	1	0	1	0	0	0	29	
1982	Commercial	12	0	8	0	0	0	0	0	20	
	TPWD	0	1	0	0	0	0	0	0	1	
	Total	27	13	9	0	1	0	0	0	50	
1982	Sport	6	31	1	0	0	0	0	0	38	
	Commercial	0	0	1	0	0	0	0	0	1	
	Total	6	31	2	0	0	0	0	0	39	

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
Lower Laguna Madre	1983	Sport	6	46	0	0	0	0	0	52	
		Commercial	0	1	0	0	0	0	0	0	1
		Unknown	1	0	0	0	0	0	0	0	1
			Total	7	47	0	0	0	0	0	54
	1984	Sport	1	0	0	0	0	0	0	0	1
		Total	1	0	0	0	0	0	0	0	1
	1985	Sport	15	0	1	0	0	0	0	0	16
		Commercial	1	0	1	0	0	0	0	0	2
		TPWD	1	0	0	0	0	0	0	0	1
		Unknown	2	0	0	0	0	0	0	0	2
			Total	19	0	2	0	0	0	0	21
	1986	Sport	10	1	1	0	0	0	0	0	12
Total		10	1	1	0	0	0	0	0	12	
1987	Sport	3	1	1	0	0	0	0	0	5	
	Total	3	1	1	0	0	0	0	0	5	
1988	Sport	6	0	0	0	0	0	0	0	6	
	TPWD	1	0	0	0	0	0	0	0	1	
	Total	7	0	0	0	0	0	0	0	7	
Unknown	Unknown	0	1	0	0	0	0	0	0	1	
	Total	0	1	0	0	0	0	0	0	1	
1976	Sport	10	0	3	0	0	0	0	0	13	
	Commercial	20	0	4	0	0	0	0	1	25	
	Total	30	0	7	0	0	0	0	18	38	
1977	Sport	16	1	2	0	1	1	0	0	20	
	Commercial	27	0	14	1	0	0	0	0	42	
	TPWD	1	0	1	0	0	0	0	0	2	
	Unknown	0	0	1	0	0	0	0	0	1	
		Total	44	1	18	1	1	0	0	65	
1978	Sport	17	4	9	0	1	1	1	0	32	
	Commercial	56	1	15	1	0	0	0	0	73	
	TPWD	1	0	1	0	0	0	0	0	2	
	Unknown	1	0	1	0	0	0	0	0	2	
		Total	75	5	26	1	1	1	0	109	
1979	Sport	11	10	3	1	0	0	0	0	25	
	Commercial	31	0	15	2	0	0	0	0	48	
	TPWD	1	1	0	1	0	0	0	0	3	
	Total	43	11	18	4	0	0	0	0	76	



Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1980		Sport	10	3	1	0	0	0	0	14
		Commercial	3	0	2	1	0	0	1	7
		TPWD	0	2	1	0	0	0	0	3
		Unknown	1	0	0	0	0	0	0	1
		Total	14	5	4	1	0	1 <sup>a</sup>	25	
1981		Sport	18	12	1	0	0	0	0	31
		commercial	3	0	1	0	0	0	0	4
		TPWD	4	1	0	0	0	0	0	5
		Unknown	1	0	0	0	0	0	0	1
		Total	26	13	2	0	0	0	41	
1982		Sport	20	34	2	0	0	0	0	56
		Commercial	1	0	0	0	0	0	0	1
		TPWD	1	1	0	0	0	0	0	2
		Total	22	35	2	0	0	0	59	
1983		Sport	8	56	0	0	0	0	0	64
		TPWD	2	1	0	0	0	0	0	3
		Unknown	0	1	0	0	0	0	0	1
		Total	10	58	0	0	0	0	0	68
1984		Sport	10	7	0	0	0	0	0	17
		Total	10	7	0	0	0	0	0	17
1985		Sport	22	4	0	0	0	0	0	26
		Commercial	0	1	0	0	0	0	0	1
		TPWD	1	0	0	0	0	0	0	1
		Unknown	1	0	0	0	0	0	0	1
		Total	24	5	0	0	0	0	29	
1986		Sport	30	2	3	0	0	0	0	35
		TPWD	2	0	2	0	0	0	0	4
		Total	32	2	5	0	0	0	0	39
1987		Sport	26	0	2	0	2	0	0	30
		TPWD	2	0	0	0	0	0	0	2
		Total	28	0	2	0	2	0	0	32
1988		Sport	10	0	0	0	0	0	0	10
		Total	10	0	0	0	0	0	0	10
Coastwide	Unknown	Sport	20	0	6	0	0	0	1	27
		TPWD	7	1	0	0	0	0	0	8
		Unknown	1	1	1	1	0	0	0	4
		Total	28	2	7	1	0	0	1	39
1975		Sport	3	0	1	0	0	0	0	4
		Commercial	1	0	0	0	2	0	0	3
		Total	4	0	1	0	2	0	0	7

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
1976		Sport	131	28	37	7	8	3	1	215	
		Commercial	109	0	30	2	0	1	2	144	
		TPWD	5	0	1	0	0	0	0	2	8
		Unknown	14	3	2	1	2	0	0	0	22
		Total	259	31	70	10	10	4	5	389	
1977		Sport	190	21	46	7	16	0	0	280	
		Commercial	136	3	89	5	4	0	0	0	237
		TPWD	15	0	6	1	0	0	1	1	23
		Unknown	12	4	13	0	2	0	0	0	31
		Total	353	28	154	13	22	0	1	571	
1978		Sport	267	29	68	8	19	1	0	392	
		Commercial	237	4	89	7	3	0	0	0	340
		TPWD	20	0	8	0	1	0	0	0	29
		Unknown	21	0	10	0	0	0	0	0	31
		Total	545	33	175	15	23	1	0	792	
1979		Sport	286	27	43	12	16	0	21	405	
		Commercial	175	3	96	5	5	0	0	0	284
		TPWD	17	2	4	2	1	1	0	0	27
		Unknown	4	0	2	0	1	0	0	0	7
		Total	482	32	145	19	23	1	21	723	
1980		Sport	439	52	30	6	9	0	0	536	
		Commercial	154	12	44	5	5	0	1	221	
		TPWD	51	2	3	1	0	0	0	0	57
		Unknown	5	0	2	0	0	0	0	0	7
		Total	649	66	79	12	14	0	1	821	
1981		Sport	259	203	24	8	5	0	0	499	
		Commercial	88	12	13	0	5	0	0	0	118
		TPWD	38	4	2	0	0	0	0	0	44
		Unknown	2	0	0	0	0	0	0	0	2
		Total	387	219	39	8	10	0	0	663	
1982		Sport	185	360	33	10	4	0	0	592	
		Commercial	15	3	10	0	0	0	0	0	28
		TPWD	4	2	5	0	0	0	0	0	11
		Unknown	1	3	0	0	0	0	0	0	4
		Total	205	368	48	10	4	0	0	635	
1983		Sport	126	389	10	7	1	0	1	534	
		Commercial	1	2	1	0	2	0	0	0	6
		TPWD	14	7	2	1	0	0	0	0	24
		Sport/survey	0	1	0	0	0	0	0	0	1
		Unknown	1	1	0	0	0	0	0	2	
		Total	142	400	13	8	3	0	1	567	

Table 4. (Cont'd.)

Bay	Year	Fishing category	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1984		Sport	119	86	7	0	7	1	0	220
		Commercial	1	0	1	0	0	0	0	3
		TPWD	0	3	2	0	0	0	0	5
		Sport/survey	1	0	0	0	0	0	0	1
		Unknown	2	1	0	0	0	0	0	3
Total	123	90	10	0	8	1	0	0	232	
1985		Sport	161	35	16	6	8	0	3	229
		Commercial	2	1	2	0	1	0	0	6
		TPWD	6	0	3	0	0	0	0	9
		Sport/survey	3	0	0	0	0	0	0	3
		Unknown	3	0	0	0	0	0	0	3
Total	175	36	21	6	9	0	3	0	250	
1986		Sport	234	19	21	3	6	0	1	284
		Commercial	5	0	2	0	2	0	0	9
		TPWD	8	0	4	1	0	0	0	13
		Sport/survey	2	1	0	0	0	0	0	3
		Total	249	20	27	4	8	0	1	0
1987		Sport	203	15	30	2	15	0	0	265
		Commercial	5	0	4	0	0	0	0	9
		TPWD	9	0	0	1	0	0	0	10
		Comm./survey	0	0	1	0	0	0	0	1
		Total	217	15	35	3	15	0	0	0
1988		Sport	105	7	15	1	2	1	11	142
		Commercial	1	0	3	0	0	0	0	4
		TPWD	8	0	1	0	0	0	0	10
		Unknown	2	0	2	0	0	0	0	5
		Total	116	7	21	1	2	1	13	0
Grand Total		Sport	2,728	1,271	387	77	116	6	39	4,624
		Commercial	930	40	384	24	30	1	3	1,412
		TPWD	202	21	41	7	2	1	4	278
		Sport/survey	6	2	0	0	0	0	0	8
		Comm./survey	0	0	1	0	0	0	0	0
Unknown	68	13	32	2	5	0	1	1	121	
Total	3,934	1,347	845	110	153	8	47	0	6,444	

<sup>a</sup>Atlantic croaker

<sup>b</sup>Striped bass

<sup>c</sup>Tarpon

<sup>d</sup>Spot

<sup>e</sup>Hardhead catfish

<sup>f</sup>Red snapper

<sup>g</sup>Striped mullet

Table 5. Number of fish tags returned from same bay, other bay, Gulf of Mexico/Texas Territorial Sea (TTS) or from outside TTS during November 1975-December 1988. Only areas where returns occurred are listed.

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
Sabine Lake	1986	Same bay	7	0	1	0	1	0	0	9	
		TTS	1	0	0	0	0	0	0	1	
		Total	8	0	1	0	1	0	0	0	10
1987	Same bay	Same bay	12	0	5	0	0	0	0	17	
		TTS	0	0	0	0	1	0	0	1	
		Outside TTS	1	0	0	0	0	0	0	0	1
		Unknown	1	0	1	0	0	0	0	0	2
Total	14	0	6	0	1	0	0	0	21		
1988	Same bay	Same bay	2	0	0	0	0	0	0	2	
		TTS	0	2	0	0	0	0	0	1	3
		Total	2	2	0	0	0	0	0	1 <sup>a</sup>	5
Unknown	Same bay	Same bay	1	1	0	0	0	0	0	2	
		TTS	1	0	0	0	0	0	0	0	1
		Total	2	1	0	0	0	0	0	0	3
1975	Same bay	Same bay	2	0	0	0	0	0	0	2	
		TTS	2	0	0	0	0	0	0	0	2
		Total	4	0	0	0	0	0	0	0	4
1976	Same bay	Same bay	16	29	5	0	2	0	1	53	
		Other bay	1	0	0	0	0	0	0	0	1
		TTS	1	1	0	0	0	0	0	0	2
		Unknown	0	1	0	0	0	0	0	0	1
Total	18	31	5	0	2	0	0	1 <sup>a</sup>	57		
1977	Same bay	Same bay	16	18	6	0	1	0	0	41	
		TTS	1	6	1	0	0	0	0	0	8
		Total	17	24	7	0	1	0	0	0	49
1978	Same bay	Same bay	26	10	4	0	4	0	0	44	
		TTS	2	2	0	0	1	0	0	0	5
		Total	28	12	4	0	5	0	0	0	49
1979	Same bay	Same bay	28	4	3	1	4	0	0	40	
		Other bay	0	1	0	0	1	0	0	0	2
		TTS	1	1	0	0	0	0	0	0	2
		Unknown	1	0	0	0	0	0	0	0	1
Total	30	6	3	1	5	0	0	0	45		
1980	Same bay	Same bay	55	25	0	1	1	0	0	82	
		TTS	3	1	0	0	0	0	0	0	4
		Total	58	26	0	1	1	0	0	0	86
1981	Same bay	Same bay	13	65	3	0	0	0	0	81	
		TTS	0	3	0	0	0	0	0	0	3
		Unknown	1	2	0	0	0	0	0	0	3
		Total	14	70	3	0	0	0	0	0	87



Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1979	Same bay	5	0	5	2	1	0	0	0	13
	Other bay	0	0	0	0	1	0	0	0	1
	TTS	0	0	1	0	0	0	0	0	1
	Total	5	0	6	2	2	0	0	0	15
1980	Same bay	7	0	0	0	0	0	0	0	7
	Other bay	1	0	0	0	1	0	0	0	2
	TTS	2	0	0	0	0	0	0	0	2
	Total	10	0	0	0	1	0	0	0	11
1981	Same bay	5	16	4	0	1	0	0	0	26
	Other bay	1	6	1	0	0	0	0	0	8
	TTS	0	1	0	0	0	0	0	0	1
	Total	6	23	5	0	1	0	0	0	35
1982	Same bay	4	24	4	0	1	0	0	0	33
	Other bay	0	2	1	1	0	0	0	0	4
	TTS	3	0	0	0	0	0	0	0	3
	Unknown	0	1	0	0	0	0	0	0	1
	Total	7	27	5	1	1	0	0	0	41
1983	Same bay	7	29	1	0	0	0	0	0	37
	Other bay	0	4	0	0	0	0	0	0	4
	TTS	0	6	0	0	0	0	0	0	6
	Total	7	39	1	0	0	0	0	0	47
1984	Same bay	6	4	3	0	0	0	0	0	13
	Other bay	3	1	0	0	0	0	0	0	4
	TTS	2	1	0	0	0	0	0	0	3
	Total	11	6	3	0	0	0	0	0	20
1985	Same bay	1	1	0	0	0	0	0	0	2
	Other bay	0	1	0	1	0	0	0	0	2
	TTS	1	0	1	1	0	0	0	0	3
	Total	2	2	1	2	0	0	0	0	7
1986	Same bay	8	0	1	1	1	0	0	0	11
	Other bay	1	0	3	0	0	0	0	0	4
	TTS	1	0	1	0	0	0	0	0	2
	Total	10	0	5	1	1	0	0	0	17
1987	Same bay	17	0	1	1	2	0	0	0	21
	Other bay	0	0	1	0	0	0	0	0	1
	TTS	2	0	0	0	0	0	0	0	2
	Total	19	0	2	1	2	0	0	0	24
1988	Same bay	8	1	2	0	1	0	0	0	12
	Other bay	2	0	1	0	0	0	0	0	3
	Total	10	1	3	0	1	0	0	0	15

Table 5. (Cont'd.)

Bay	Return Year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
Matagorda	Unknown	Other bay	0	0	1	0	0	0	0	1
		Unknown	1	0	0	0	0	0	0	1
		Total	1	0	1	0	0	0	0	0
1975	Same bay	Other bay	1	0	0	0	0	0	0	1
		Unknown	1	0	0	0	0	0	0	1
		Total	2	0	0	0	0	0	0	0
1976	Same bay	Other bay	43	0	14	0	3	1	0	61
		Unknown	1	0	1	0	0	0	0	2
		Total	44	0	15	0	3	1	0	0
1977	Same bay	Other bay	82	0	30	1	3	0	0	116
		Unknown	2	0	1	0	0	0	0	3
		Total	84	0	31	1	3	0	0	0
1978	Same bay	Other bay	127	11	41	0	2	0	0	181
		Unknown	9	0	4	1	0	0	0	14
		Total	136	11	45	1	2	0	0	0
1979	Same bay	Other bay	102	6	14	1	1	0	0	124
		Unknown	3	0	1	0	0	0	0	4
		Total	105	6	15	1	1	0	0	0
1980	Same bay	Other bay	95	1	4	0	0	0	0	100
		Unknown	4	0	0	0	0	0	0	4
		Total	99	1	4	0	0	0	0	0
1981	Same bay	Other bay	45	21	1	1	0	0	0	68
		Unknown	1	2	0	0	0	0	0	3
		Total	46	23	1	1	0	0	0	0
1982	Same bay	Other bay	12	44	2	0	0	0	0	58
		Unknown	1	1	0	0	0	0	0	2
		Total	13	45	2	0	0	0	0	0
1983	Same bay	Other bay	11	36	1	0	0	0	0	48
		Unknown	0	3	0	0	0	0	0	3
		Total	11	39	1	0	0	0	0	0

Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1984	Same bay	5	22	3	0	1	0	0	0	31
	Other bay	4	10	0	0	0	0	0	0	14
	TTS	3	6	1	0	0	0	0	0	10
	Total	12	38	4	0	1	0	0	0	55
1985	Same bay	5	6	6	0	1	0	0	0	18
	Other bay	0	2	0	1	0	0	0	0	3
	TTS	4	2	1	0	0	0	0	0	7
	Total	9	10	7	1	1	0	0	0	28
1986	Same bay	21	0	1	2	0	0	0	0	24
	Other bay	1	1	0	0	0	0	0	0	2
	TTS	2	1	0	0	0	0	0	0	3
	Unknown	1	0	0	0	1	0	0	0	2
	Total	25	2	1	2	1	0	0	0	31
1987	Same bay	19	0	1	0	1	0	0	0	21
	Other bay	1	0	0	0	0	0	0	0	1
	TTS	2	0	0	1	0	0	0	0	3
	Unknown	2	0	0	0	1	0	0	0	3
	Total	24	0	1	1	2	0	0	0	28
1988	Same bay	15	0	4	0	0	0	0	0	19
	Other bay	1	0	0	0	0	0	0	0	1
	TTS	2	0	0	0	0	0	0	0	2
	Unknown	3	0	0	0	0	0	0	0	3
	Total	21	0	4	0	0	0	0	0	25
Unknown	Same bay	1	0	0	0	0	0	0	0	1
	Unknown	17	0	5	0	0	0	0	1	23
	Total	18	0	5	0	0	0	0	1 <sup>c</sup>	24
1975	Same bay	0	0	1	0	0	0	0	0	1
	Total	0	0	1	0	0	0	0	0	1
1976	Same bay	40	0	3	1	0	0	2	0	46
	Other bay	2	0	0	2	0	0	0	0	4
	TTS	1	0	0	0	0	0	0	0	1
	Total	43	0	3	3	0	0	2	0	51
1977	Same bay	50	0	11	0	3	0	0	0	64
	Other bay	1	0	4	0	2	0	0	0	7
	TTS	1	0	0	0	0	0	0	0	1
	Unknown	4	0	2	0	1	0	0	0	7
	Total	56	0	17	0	6	0	0	0	79
1978	Same bay	57	0	8	0	3	0	0	0	68
	Other bay	6	0	3	0	0	0	0	0	9
	TTS	2	0	0	0	0	0	0	0	2
	Outside TTS	1	0	0	0	0	0	0	0	1
	Unknown	0	0	2	0	0	0	0	0	2
	Total	66	0	13	0	3	0	0	0	82



Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1979		Same bay	71	0	2	2	6	0	0	81
		Other bay	8	0	3	0	0	0	0	11
		TTS	1	0	0	0	0	0	0	1
		Unknown	4	0	1	1	0	0	0	6
	Total	84	0	6	3	6	0	0	99	
1980		Same bay	44	0	4	1	2	0	0	51
		Other bay	2	0	0	1	0	0	0	3
		TTS	2	0	0	0	0	0	0	2
		Unknown	5	0	1	0	0	0	0	6
	Total	53	0	5	2	2	0	0	62	
1981		Same bay	20	8	1	1	0	0	0	30
		Other bay	4	3	2	1	0	0	0	10
		TTS	2	0	0	0	0	0	0	2
		Unknown	1	0	0	0	0	0	0	1
	Total	27	11	3	2	0	0	0	43	
1982		Same bay	8	10	5	1	0	0	0	24
		Other bay	1	4	1	0	0	0	0	6
		TTS	0	1	0	3	0	0	0	4
		Total	9	15	6	4	0	0	0	34
1983		Same bay	5	27	0	1	0	0	0	33
		Other bay	0	10	0	1	0	0	0	11
		TTS	5	37	0	2	0	0	0	44
		Total	10	74	0	4	0	0	0	84
1984		Same bay	7	1	0	0	2	0	0	10
		Other bay	2	1	1	0	2	0	0	6
		TTS	1	0	0	0	0	0	0	1
		Outside TTS	1	0	0	0	0	0	0	1
	Total	11	2	1	0	4	0	0	18	
1985		Same bay	10	0	2	0	0	0	0	12
		Other bay	1	0	0	0	0	0	0	1
		TTS	1	1	0	0	0	0	0	2
		Total	12	1	2	0	0	0	0	15
1986		Same bay	16	0	1	0	2	0	0	19
		Other bay	2	0	1	0	0	0	0	3
		TTS	1	0	0	0	0	0	0	1
		Outside TTS	1	0	0	0	0	0	0	1
	Total	20	0	2	0	2	0	0	24	
1987		Same bay	20	3	2	0	2	0	0	27
		Other bay	3	1	2	0	0	0	0	6
		TTS	1	0	0	0	0	0	0	1
		Unknown	0	0	1	0	0	0	0	1
	Total	24	4	5	0	2	0	0	35	

Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
Arkansas	1988	Same bay	16	1	1	0	0	1	0	19	
		Other bay	2	0	1	0	0	0	0	3	
		TTS	1	0	0	0	0	0	0	1	
		Unknown	0	0	1	0	0	0	0	1	
		Total	19	1	3	0	0	1	0	24	
	Unknown	Same bay	0	0	0	1	0	0	0	0	1
		Other bay	1	0	0	0	0	0	0	0	1
		Unknown	6	0	0	0	0	0	0	0	6
		Total	7	0	0	1	0	0	0	0	8
	1976	Same bay	56	0	23	2	1	1	1	0	83
		Other bay	1	0	2	2	1	0	0	0	6
		TTS	1	0	0	1	0	0	0	0	2
Unknown		1	0	0	0	0	0	0	0	3	
	Total	59	0	25	5	2	1	2 <sup>d</sup>	2	94	
1977	Same bay	49	1	23	4	0	0	0	0	77	
	Other bay	2	0	3	0	0	0	0	0	5	
	TTS	0	0	0	1	0	0	0	0	1	
	Unknown	1	0	1	0	0	0	0	0	2	
	Total	52	1	27	5	0	0	0	0	85	
1978	Same bay	101	2	16	5	3	3	0	0	127	
	Other bay	5	0	3	1	0	0	0	0	9	
	TTS	1	0	0	0	0	0	0	0	1	
	Unknown	7	0	4	0	0	0	0	0	11	
	Total	114	2	23	6	3	0	0	0	148	
1979	Same bay	106	4	18	4	1	1	1	0	134	
	Other bay	7	2	2	0	0	0	0	0	11	
	TTS	5	0	1	3	0	0	0	0	9	
	Unknown	8	0	3	0	0	0	0	0	11	
	Total	126	6	24	7	1	1	0	0	165	
1980	Same bay	245	18	21	3	2	2	0	0	289	
	Other bay	12	2	3	1	0	0	0	0	18	
	TTS	6	0	1	0	1	1	0	0	8	
	Unknown	22	1	3	0	1	1	0	0	27	
	Total	285	21	28	4	4	0	0	0	342	
1981	Same bay	141	36	9	2	2	2	0	0	190	
	Other bay	4	0	2	2	1	1	0	0	9	
	TTS	7	1	0	1	0	0	0	0	9	
	Unknown	32	8	4	0	1	1	0	0	45	
	Total	184	45	15	5	4	0	0	0	253	
1982	Same bay	87	48	23	2	0	0	0	0	160	
	Other bay	2	6	2	1	0	0	0	0	11	
	TTS	9	0	2	2	1	1	0	0	14	
	Total	98	54	27	5	1	1	0	0	185	

Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1983		Same bay	21	47	6	4	2	0	0	80
		Other bay	2	3	2	0	0	0	0	7
		TTS	2	0	0	1	0	0	0	5
	Total	25	52	8	5	2	2	0	0	92
1984		Same bay	7	4	0	0	1	0	0	12
		Other bay	1	1	1	0	1	0	0	4
		TTS	2	0	1	0	0	0	0	3
	Total	10	5	2	0	2	2	0	0	19
1985		Same bay	18	1	4	0	1	0	0	24
		Other bay	0	0	0	1	0	0	0	1
		Total	18	1	4	1	1	0	0	25
1986		Same bay	20	2	6	0	1	0	0	29
		Other bay	0	0	2	0	0	0	0	2
		TTS	0	0	1	0	0	0	0	1
	Total	20	2	9	0	1	0	0	0	32
1987		Same bay	35	1	6	0	0	0	0	42
		Other bay	0	0	2	0	0	0	0	2
		Total	35	1	8	0	0	0	0	44
1988		Same bay	10	0	4	1	0	0	0	15
		Other bay	0	0	1	0	0	0	0	1
		Total	10	0	5	1	0	0	0	16
Unknown	TTS	0	0	1	0	0	0	0	0	1
	Total	0	0	1	0	0	0	0	0	1
1975	Same bay	1	0	0	0	0	1	0	0	2
	Total	1	0	0	0	0	1	0	0	2
1976	Same bay	23	0	2	2	2	2	0	0	29
	Other bay	5	0	1	0	0	0	0	0	6
	Total	28	0	3	2	2	2	0	0	35
1977	Same bay	38	2	8	4	2	2	0	1	55
	Other bay	8	0	1	2	1	0	0	0	12
	TTS	1	0	0	0	0	0	0	0	1
Unknown	Unknown	1	0	0	0	0	0	0	0	1
	Total	48	2	9	6	3	3	0	1 <sup>e</sup>	69
1978	Same bay	60	0	7	3	5	5	0	0	75
	Other bay	13	0	6	0	0	0	0	0	19
	TTS	0	0	0	2	0	0	0	0	2
Unknown	Unknown	9	0	2	1	0	0	0	0	12
	Total	82	0	15	6	5	5	0	0	108

Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
1979		Same bay	36	1	3	1	4	0	0	45	
		Other bay	9	0	0	0	1	0	0	10	
		TTS	1	0	0	0	0	0	18	19	
		Outside TTS	2	0	0	0	0	0	3	5	
		Unknown	6	0	0	0	1	0	0	7	
	Total	54	1	3	1	6	0	21 <sup>f</sup>	86		
1980		Same bay	58	7	3	3	3	0	0	74	
		Other bay	5	2	2	0	0	0	0	9	
		TTS	3	0	0	0	0	0	0	3	
		Unknown	17	3	2	0	1	0	0	23	
		Total	83	12	7	3	4	0	0	109	
1981		Same bay	22	17	1	0	1	0	0	41	
		Other bay	5	2	0	0	0	0	0	7	
		TTS	2	0	0	0	0	0	0	2	
		Unknown	28	2	0	0	3	0	0	33	
		Total	57	21	1	0	4	0	0	83	
1982		Same bay	6	44	2	0	1	0	0	53	
		Other bay	4	5	2	0	0	0	0	11	
		TTS	3	1	0	0	0	0	0	4	
		Unknown	1	1	0	0	0	0	0	2	
		Total	14	51	4	0	1	0	0	70	
1983		Same bay	9	48	2	0	0	0	0	59	
		Other bay	0	10	0	0	1	0	0	11	
		TTS	0	1	0	1	0	0	0	2	
		Total	9	59	2	1	1	0	0	72	
	1984		Same bay	13	4	0	0	1	1	0	19
		Other bay	1	0	0	0	0	0	0	1	
		Total	14	4	0	0	1	1	0	20	
1985			Same bay	18	5	2	1	2	0	0	28
			Other bay	0	2	0	0	0	0	0	2
		TTS	1	0	0	0	0	0	0	1	
		Unknown	0	0	0	0	1	0	0	1	
		Total	19	7	2	1	3	0	0	32	
1986		Same bay	14	1	2	0	2	0	0	19	
		Other bay	1	1	0	0	0	0	0	2	
		TTS	0	0	0	1	0	0	0	1	
		Total	15	2	2	1	2	0	0	22	
	1987		Same bay	11	2	2	1	1	0	0	17
		Other bay	0	1	1	0	0	0	0	2	
		Unknown	1	1	0	0	0	0	0	2	
		Total	12	4	3	1	1	0	0	21	



Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead flounder	Southern flounder	Gulf flounder	Other species	All species
1985	Same bay	16	0	2	0	0	0	0	0	18
	Other bay	3	0	0	0	0	0	0	0	3
	Total	19	0	2	0	0	0	0	0	21
1986	Same bay	10	0	0	0	0	0	0	0	10
	Other bay	0	1	0	0	0	0	0	0	1
	TTS	0	0	1	0	0	0	0	0	1
Total	10	1	1	0	0	0	0	0	0	12
1987	Same bay	2	1	1	0	0	0	0	0	4
	Other bay	1	0	0	0	0	0	0	0	1
	Total	3	1	1	0	0	0	0	0	5
1988	Same bay	6	0	0	0	0	0	0	0	6
	Other bay	1	0	0	0	0	0	0	0	1
	Total	7	0	0	0	0	0	0	0	7
Unknown	Unknown	0	1	0	0	0	0	0	0	1
	Total	0	1	0	0	0	0	0	0	1
1976	Same bay	30	0	7	0	0	0	0	1	38
	Total	30	0	7	0	0	0	0	1	38
1977	Same bay	40	1	12	1	1	1	0	0	55
	Other bay	0	0	3	0	0	0	0	0	3
	TTS	1	0	0	0	0	0	0	0	1
	Outside TTS	1	0	1	0	0	0	0	0	2
	Unknown	2	0	2	0	0	0	0	0	4
Total	44	1	18	1	1	1	0	0	0	65
1978	Same bay	75	5	19	1	1	1	0	0	101
	Other bay	0	0	3	0	0	0	0	0	3
	TTS	0	0	1	0	0	0	0	0	1
	Outside TTS	0	0	0	0	0	0	1	0	1
	Unknown	0	0	3	0	0	0	0	0	3
Total	75	5	26	1	1	1	1	0	0	109
1979	Same bay	34	11	12	2	0	0	0	0	59
	Other bay	3	0	3	1	0	0	0	0	7
	Outside TTS	0	0	0	1	0	0	0	0	1
	Unknown	6	0	3	0	0	0	0	0	9
Total	43	11	18	4	0	0	0	0	0	76
1980	Same bay	13	4	3	0	0	0	0	1	21
	Other bay	1	1	1	1	0	0	0	0	4
	Total	14	5	4	1	0	0	0	1 <sup>a</sup>	25
1981	Same bay	22	12	1	0	0	0	0	0	35
	Other bay	3	1	0	0	0	0	0	0	4
	TTS	1	0	0	0	0	0	0	0	1
	Outside TTS	0	0	1	0	0	0	0	0	1
Total	26	13	2	0	0	0	0	0	0	41

Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1982	Same bay	18	30	2	0	0	0	0	0	50
	Other bay	1	5	0	0	0	0	0	0	6
	TTS	3	0	0	0	0	0	0	0	3
	Total	22	35	2	0	0	0	0	0	59
1983	Same bay	10	54	0	0	0	0	0	0	64
	Other bay	0	3	0	0	0	0	0	0	3
	Unknown	0	1	0	0	0	0	0	0	1
	Total	10	58	0	0	0	0	0	0	68
1984	Same bay	10	7	0	0	0	0	0	0	17
	Total	10	7	0	0	0	0	0	0	17
1985	Same bay	22	3	0	0	0	0	0	0	25
	Other bay	1	2	0	0	0	0	0	0	3
	Unknown	1	0	0	0	0	0	0	0	1
	Total	24	5	0	0	0	0	0	0	29
1986	Same bay	32	1	5	0	0	0	0	0	38
	Other bay	0	1	0	0	0	0	0	0	1
	Total	32	2	5	0	0	0	0	0	39
1987	Same bay	24	0	2	0	0	1	0	0	27
	Unknown	4	0	0	0	1	1	0	0	5
	Total	28	0	2	0	2	2	0	0	32
1988	Same bay	8	0	0	0	0	0	0	0	8
	Other bay	1	0	0	0	0	0	0	0	1
	Outside TTS	1	0	0	0	0	0	0	0	1
	Total	10	0	0	0	0	0	0	0	10
Unknown	Same bay	2	1	0	1	1	0	0	0	4
	Other bay	1	0	1	0	0	0	0	0	2
	TTS	1	0	1	0	0	0	0	0	2
	Unknown	24	1	5	0	0	0	1	1	31
	Total	28	2	7	1	1	0	0	1	39
1975	Same bay	4	0	1	0	0	2	0	0	7
	Total	4	0	1	0	0	2	0	0	7
1976	Same bay	236	29	65	5	9	4	3	3	351
	Other bay	17	0	4	4	1	0	0	0	26
	TTS	4	1	0	1	0	0	0	0	6
	Outside TTS	1	0	0	0	0	0	0	0	1
	Unknown	1	1	1	0	0	0	0	2	5
	Total	259	31	70	10	10	4	5	5	389

Coastwide

Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species	
1977	Same bay	Other bay	21	0	17	10	17	0	1	494	
		TTS	5	6	2	1	0	0	0	44	
		Outside TTS	1	0	1	0	0	0	0	0	14
		Unknown	10	0	6	0	1	0	0	0	2
		Total	353	28	154	13	22	0	0	1	571
1978	Same bay	Other bay	472	31	121	10	20	0	0	654	
		TTS	36	0	28	2	2	0	0	0	68
		Outside TTS	8	2	2	2	1	0	0	0	15
		Unknown	28	0	0	0	0	1	0	0	2
		Total	545	33	175	15	23	1	0	0	792
1979	Same bay	Other bay	405	28	118	13	18	1	0	583	
		TTS	12	1	5	3	0	0	0	0	52
		Outside TTS	2	0	0	1	0	0	0	3	39
		Unknown	32	0	8	1	2	0	0	0	6
		Total	482	32	145	19	23	1	0	21	723
1980	Same bay	Other bay	545	56	61	8	10	0	1	681	
		TTS	31	5	7	3	1	0	0	0	47
		Outside TTS	21	1	2	1	1	0	0	0	26
		Unknown	52	4	9	0	2	0	0	0	67
		Total	649	66	79	12	14	0	1	1	821
1981	Same bay	Other bay	289	185	28	4	5	0	0	511	
		TTS	18	15	5	3	1	0	0	0	42
		Outside TTS	0	0	1	0	0	0	0	0	23
		Unknown	65	12	5	0	4	0	0	0	1
		Total	387	219	39	8	10	0	0	0	663
1982	Same bay	Other bay	167	322	39	3	3	0	0	534	
		TTS	10	23	7	2	0	0	0	0	42
		Outside TTS	27	21	2	5	1	0	0	0	56
		Unknown	1	2	0	0	0	0	0	0	3
		Total	205	358	48	10	4	0	0	0	635
1983	Same bay	Other bay	126	339	11	5	2	0	0	483	
		TTS	3	40	2	1	1	0	0	0	47
		Outside TTS	13	18	0	2	0	0	0	0	33
		Unknown	0	3	0	0	0	0	1	0	4
		Total	142	400	13	8	3	0	1	1	567
1984	Same bay	Other bay	91	66	6	0	5	1	0	169	
		TTS	13	14	2	0	3	0	0	0	32
		Outside TTS	18	10	2	0	0	0	0	0	30
		Unknown	1	0	0	0	0	0	0	0	1
		Total	123	90	10	0	8	0	1	0	232



Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
1985		Same bay	156	25	19	2	8	0	3	213
		Other bay	5	7	0	3	0	0	0	15
		TTS	13	4	2	1	0	0	0	20
		Unknown	1	0	0	0	1	0	0	2
	Total	175	36	21	6	9	0	3	250	
1986		Same bay	226	14	17	3	7	0	1	268
		Other bay	5	4	6	0	0	0	0	15
		TTS	15	2	3	1	0	0	0	21
		Outside TTS	2	0	0	0	0	0	0	2
		Unknown	1	0	1	0	1	0	0	3
		Total	249	20	27	4	8	0	1	309
1987		Same bay	183 <sup>d</sup>	11	26	2	10	0	0	232
		Other bay	5	2	6	0	0	0	0	13
		TTS	12	1	1	1	1	3	3	16
		Outside TTS	4	0	0	0	0	0	0	4
		Unknown	13	1	2	0	4	0	0	20
		Total	217	15	35	3	15	0	0	285
1988		Same bay	100	4	16	1	2	1	6	130
		Other bay	7	0	4	0	0	0	6	17
		TTS	4	3	0	0	0	0	1	8
		Outside TTS	2	0	0	0	0	0	0	2
		Unknown	3	0	1	0	0	0	0	4
		Total	116	7	21	1	2	1	13	161
Grand Total		Same bay	3,318	1,133	656	67	118	7	15	5,314
		Other bay	203	113	103	21	16	0	6	462
		TTS	168	77	22	19	4	0	19	309
		Outside TTS	14	0	2	1	0	1	3	21
		Unknown	231	24	62	2	15	0	4	338
		Total	3,934	1,347	845	110	153	8	47	6,444

<sup>a</sup>Atlantic croaker<sup>b</sup>Striped bass<sup>c</sup>Tarpon<sup>d</sup>Spot<sup>e</sup>Hardhead catfish<sup>f</sup>Red snapper<sup>g</sup>Striped mullet

Table 6. Total number of rewards and total amount paid for returned internal abdominal anchor tags during November 1975-December 1988.

Bay	Year	Number of rewards					Total	Total amount paid \$
		\$1	\$5	\$10	\$25			
Sabine Lake	1986	9	1	0	0	10	14	
	1987	19	0	1	1	21	54	
	1988	3	1	1	0	5	18	
Galveston	Unknown	3	0	0	0	3	3	
	1975	2	0	0	0	2	2	
	1976	55	1	1	0	57	70	
	1978	43	3	0	3	49	133	
	1979	39	1	4	1	45	109	
	1980	68	10	5	3	86	243	
	1981	78	4	4	1	87	163	
	1982	127	4	8	1	140	252	
	1983	124	5	6	2	137	259	
	1984	71	4	5	2	82	191	
	1985	84	4	3	2	93	184	
	1986	104	8	6	4	122	304	
	1987	65	5	4	1	75	155	
	1988	42	3	2	0	47	77	
East Matagorda	1976	16	3	0	0	19	31	
	1977	50	2	3	2	57	140	
	1978	25	1	3	1	30	85	
	1979	15	0	0	0	15	15	
	1980	8	2	1	0	11	28	
	1981	33	1	1	0	35	48	
	1982	40	0	1	0	41	50	
	1983	38	6	2	1	47	113	
	1984	16	0	4	0	20	56	
	1985	6	0	0	1	7	31	
	1986	16	0	0	1	17	41	
Matagorda	1987	20	1	2	1	24	70	
	1988	13	2	0	0	15	23	
	Unknown	2	0	0	0	2	2	
	1975	1	0	0	0	1	1	
	1976	57	5	1	0	63	92	
	1977	112	2	7	1	122	217	
	1978	187	11	8	5	211	447	
	1979	127	6	7	3	143	302	
	1980	100	5	7	2	114	245	
	1981	63	2	2	4	71	193	
	1982	58	8	1	0	67	108	
1983	47	3	2	1	53	107		
1984	48	3	3	1	55	118		
1985	22	4	2	0	28	62		
1986	28	2	1	0	31	48		
1987	26	1	1	0	28	41		
1988	23	2	0	0	25	33		

Table 6. (Cont'd.)

Bay	Year	Number of rewards					Total amount paid \$
		\$1	\$5	\$10	\$25	Total	
San Antonio	Unknown	22	1	1	0	24	37
	1975	1	0	0	0	1	1
	1976	46	1	3	1	51	106
	1977	71	2	4	2	79	171
	1978	69	6	6	1	82	184
	1979	80	8	7	4	99	290
	1980	55	3	4	0	62	110
	1981	40	1	2	0	43	65
	1982	30	2	2	0	34	60
	1983	40	0	3	1	44	95
	1984	15	1	0	2	18	70
	1985	13	1	1	0	15	28
	1986	23	1	0	0	24	28
	1987	30	1	4	0	35	75
	1988	20	2	1	1	24	65
Aransas	Unknown	8	0	0	0	8	8
	1975	0	0	0	0	0	0
	1976	80	4	4	6	84	290
	1977	76	5	2	2	85	171
	1978	134	6	7	1	148	259
	1979	147	11	6	1	165	287
	1980	311	9	16	6	342	666
	1981	236	3	9	5	253	466
	1982	160	8	12	5	185	445
	1983	82	5	5	0	92	157
	1984	19	0	0	0	19	19
	1985	22	1	2	0	25	47
	1986	28	1	2	1	32	78
	1987	38	3	2	1	44	98
	1988	14	0	2	0	16	34
Corpus Christi	Unknown	1	0	0	0	1	1
	1975	2	0	0	0	2	2
	1976	29	4	2	0	35	69
	1977	61	5	3	0	68	116
	1978	96	3	5	4	108	261
	1979	78	4	1	3	86	183
	1980	88	7	7	7	109	368
	1981	75	4	3	1	83	150
	1982	63	2	2	3	70	168
	1983	66	4	2	0	72	106
	1984	16	1	2	1	20	66
	1985	30	1	1	0	32	45
	1986	16	1	1	4	22	131
1987	19	1	1	0	21	34	
1988	12	0	0	0	12	12	

Table 6. (Cont'd.)

Bay	Year	Number of rewards				Total	Total amount paid \$
		\$1	\$5	\$10	\$25		
Upper Laguna Madre	1975	0	1	0	0	1	5
	1976	28	3	1	0	32	53
	1977	39	3	2	1	45	99
	1978	48	3	3	1	55	118
	1979	84	4	5	1	94	179
	1980	64	3	3	2	82	159
	1981	45	1	3	1	50	105
	1982	36	1	0	2	39	91
	1983	49	2	0	3	54	134
	1984	1	0	0	0	1	1
	1985	20	0	1	0	21	30
	1986	12	0	0	0	12	12
	1987	5	0	0	0	5	5
	1988	5	1	1	0	7	20
Lower Laguna Madre	Unknown	1	0	0	0	1	1
	1975	0	0	0	0	0	0
	1976	30	5	3	0	38	85
	1977	59	4	1	1	65	114
	1978	102	2	4	1	109	177
	1979	64	5	6	1	76	174
	1980	24	0	1	0	25	34
	1981	38	0	3	0	41	68
	1982	50	2	5	2	59	160
	1983	64	2	2	0	68	94
	1984	15	2	0	0	17	25
	1985	25	1	1	2	29	90
	1986	35	0	2	2	39	105
	1987	28	2	2	0	32	58
1988	8	2	0	0	10	18	
Coastwide	Unknown	37	1	1	0	39	52
	1975	6	1	0	0	7	11
	1976	341	26	15	7	389	796
	1977	513	24	24	10	571	1,123
	1978	704	35	36	17	792	1,664
	1979	634	39	36	14	723	1,539
	1980	718	39	44	20	821	1,853
	1981	608	16	27	12	663	1,258
	1982	564	27	31	13	635	1,334
	1983	510	27	22	8	567	1,065
	1984	201	11	14	6	121	546
	1985	222	12	11	5	250	517
	1986	271	14	12	12	309	761
	1987	250	14	17	4	285	590
1988	140	13	7	1	161	300	
Coastwide		5,719	299	297	129	6,444	13,409

Figure 1. Nine Texas bay systems in which tagging occurred during November 1975 through December 1988.



