

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

by

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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 redfish, (Sciaenops ocellatus 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^a.

Common name	Scientific name
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>Ophidion 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>

^aCommon 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	4 ^a	312
	1987	92	5	90	0	36	0	1 ^b	208
	1988	77	4	51	6	4	0	3 ^c	145
Galveston	1975	80	0	47	8	2	0	0	137
	1976	246	572	332	27	47	0	60 ^d	1,284
	1977	152	65	192	13	41	0	0	463
	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 ^a	2,326
	1984	860	301	141	34	36	0	5 ^a	1,377
	1985	1,423	301	218	20	47	0	40 ^e	2,049
	1986	678	59	136	1	6	0	93 ^f	973
	1987	252	51	199	0	37	0	7,118 ^g	7,657
	1988	206	53	217	2	37	0	444 ^h	
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 ⁱ	205
Matagorda	1975	74	0	29	0	11	0	0	114
	1976	462	1	323	36	58	2	3 ^j	885
	1977	539	0	480	81	28	1	1 ^k	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 ^l	939
	1984	46	305	60	33	3	0	4 ^l	451
	1985	63	0	107	15	12	0	1 ^m	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	Southern Sheepshead	Gulf flounder	Other species	All species
San Antonio	1975	97	0	77	0	6	0	180
	1976	532	0	185	95	40	17	872
	1977	180	0	105	70	21	11	387
	1978	261	66	101	40	40	0	509
	1979	676	0	154	179	73	3	1,090
	1980	278	0	179	80	14	1	553
	1981	143	343	132	128	19	4	769
	1982	50	637	47	2	4	0	740
	1983	60	616	51	3	26	0	756
	1984	83	23	28	3	28	1	166
	1985	62	0	64	11	45	0	182
	1986	169	0	65	5	48	0	288
	1987	212	42	127	8	44	0	434
	1988	156	6	112	14	7	4	299
Aransas	1975	36	0	61	0	3	0	100
	1976	344	23	415	240	38	7	1,095
	1977	147	0	135	38	28	2	350
	1978	409	73	238	110	33	8	871
	1979	443	164	226	157	46	6	1,043
	1980	1,194	219	188	98	51	0	1,754
	1981	691	703	149	104	44	4	1,695
	1982	296	760	297	70	50	2	1,475
	1983	131	686	209	49	30	0	1,105
	1984	63	34	74	24	36	2	233
	1985	122	9	61	12	31	0	515
	1986	127	2	87	4	14	1	235
	1987	79	4	79	4	3	0	170
	1988	90	11	97	3	10	2	213
Corpus Christi	1975	60	0	54	28	39	8	191
	1976	155	18	135	131	46	36	596
	1977	225	1	77	55	29	7	398
	1978	268	10	108	127	43	17	576
	1979	337	106	113	98	53	13	1,003
	1980	307	160	49	29	26	0	573
	1981	190	445	106	7	12	0	760
	1982	96	673	64	3	3	0	839
	1983	46	632	113	0	8	0	799
	1984	80	36	113	11	24	3	267
	1985	142	18	39	27	29	7	262
	1986	124	49	115	8	41	8	345
	1987	113	70	85	7	19	10	304
	1988	119	20	190	10	17	9	365
Upper Laguna Madre	1975	31	0	129	0	6	0	166
	1976	121	8	248	7	3	6	435
	1977	65	3	102	5	0	0	175
	1978	94	27	1,463	0	15	0	1,599
	1979	113	49	96	0	2	0	260
	1980	203	44	124	22	8	0	401
	1981	92	353	142	0	7	0	594
	1982	66	624	78	0	17	0	785

Table 2. (Cont'd.)

Bay	Year	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
	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 ^a	483
	1986	51	4	208	1	21	0	0	285
	1987	77	4	208	0	3	0	0	292
	1988	73	1	285	9	5	0	2 ^{bb}	369
Lower Laguna Madre	1975	32	0	72	0	13	0	0	117
	1976	198	16	209	20	19	1	182 ^{cc}	645
	1977	139	2	285	10	11	0	0	447
	1978	421	174	481	242	31	4	2 ^{dd}	1,355
	1979	183	57	140	75	21	4	21 ^a	501
	1980	218	53	90	8	6	3	0	378
	1981	298	467	54	10	4	1	2 ^a	836
	1982	185	637	38	0	3	0	0	863
	1983	96	612	7	0	5	0	3 ^{ee}	723
	1984	160	21	7	0	0	0	0	188
	1985	349	11	153	0	1	0	1 ^t	515
	1986	133	0	163	1	23	0	1 ^t	321
	1987	82	3	168	2	20	0	5 ^{ff}	280
	1988	109	2	145	1	6	1	0	264
Gulf of Mexico off Sabine Lake	1987	0	2	2	0	1	0	2 ^{gg}	7
	1988	3	41	8	1	2	0	47 ^{hh}	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 ⁱⁱ	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 ^{jj}	26
	1988	7	50	9	1	0	0	7 ^{kk}	74
Gulf of Mexico off Corpus Christi Upper Laguna Madre Bays	1987	0	5	3	0	2	0	0	10
	1988	1	8	5	1	0	0	9 ^{kk}	24
Gulf of Mexico off Upper and Lower Laguna Madre Bays	1988	0	6	1	1	0	0	3 ^{ll}	11
Coastwide	1975	415	0	471	36	80	8	2	1,012
	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.)

Bay	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

^aAtlantic croaker.^bYellow bass.^cAtlantic croaker (1) and gafftopsail catfish (2).^dAtlantic croaker (46), gizzard shad (2), spot (1), hardhead catfish (6), striped mullet (4) and tripletail (1).^eTarpon (1) and striped bass (39).^fTarpon (2) and striped bass (91).^gStriped bass (7,108) and bluefish (10).^hStriped bass (436), Atlantic croaker (7) and gizzard shad (1).ⁱHardhead catfish.^jHardhead catfish (1) and southern kingfish (2).^kCrevalle jack.^lStriped bass.^mCrested cusk-eel.ⁿFlorida pompano (1) and Atlantic croaker (2).^oWhite bass.^pLargemouth bass.^qFlorida pompano.^rFlathead catfish.^sGizzard shad (1), Gulf menhaden (3), spot (9), hardhead catfish (3), striped mullet (10) and alligator gar (2).^tCommon snook.^uTarpon.^vAtlantic croaker (52), spot (7), hardhead catfish (8) and striped mullet (8).^wAtlantic croaker (1), bonnethead (2) and ocellated flounder (1).^xOcellated flounder.^yAtlantic croaker (9), gizzard shad (1), crevalle jack (2), lane snapper (2), southern kingfish (1), red snapper (265) and greater amberjack (3).^zAtlantic croaker (1) and sand seatrout (1).^{aa}Atlantic croaker (28), hardhead catfish (8), striped mullet (4) and pinfish (2).^{bb}Atlantic croaker (1) and atlantic spadefish (1).^{cc}Atlantic croaker (57), spot (40), hardhead catfish (25), striped mullet (54), pinfish (3) and pigfish (3).^{dd}Crevalle jack.^{ee}Ladyfish (2) and common snook (1).^{ff}Common snook (4) and fat snook (1).^{gg}Atlantic croaker (1) and sand seatrout (1).^{hh}Atlantic croaker (25), spot (16), bluefish (1), Florida pompano (3) and sand seatrout (2).ⁱⁱAtlantic croaker (10), spot (11) and sand seatrout (7).^{jj}Gulf kingfish (3).^{kk}Gulf kingfish (9).^{ll}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 ^a	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other ^b 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	137
	1976	GN	111	3	64	9	8	0	14	209
		TN	134	0	268	18	38	0	46	504
		RR	1	569	0	0	1	0	0	571
	1977	GN	74	0	81	8	8	0	0	121
		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
		RR	0	222	0	0	0	0	0	222
	1980	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
		BS	1	0	0	0	0	0	0	1
		RR	12	761	0	0	0	0	0	773
	1982	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
		RR	1,456	696	7	0	1	0	0	2,160
	1984	GN	123	32	138	34	11	0	5	343
		RR	737	269	3	0	25	0	0	1,034
	1985	GN	180	34	201	20	21	0	1	457
		RR	1,243	267	17	0	26	0	39	1,592
	1986	GN	344	14	129	1	6	0	4	498
		RR	334	45	7	0	0	0	2	388
		EF	0	0	0	0	0	0	87	87
	1987	GN	183	51	199	0	37	0	0	470
		RR	69	0	0	0	0	0	0	69
		EF	0	0	0	0	0	0	341	341
		SK	0	0	0	0	0	0	6,777	6,777
	1988	GN	159	53	217	2	37	0	8	476
		RR	47	0	0	0	0	0	1	48
		EF	0	0	0	0	0	0	435	435

Table 3. (Cont'd.)

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

Table 3. (Cont'd.)

Bay	Year	Gear ^a	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other ^b species	All species
1988	GN	97	1	98	14	12	0	0	0	222
	BS	1	0	0	0	0	0	0	0	1
	SK	20	0	0	0	0	0	0	0	20
San Antonio	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
1982		TN	56	0	19	5	2	1	0	83
		RR	2	343	4	0	0	0	0	348
	1983	GN	50	0	47	2	2	0	0	101
		RR	0	637	0	0	2	0	0	639
	1984	GN	60	0	51	3	26	0	0	140
		RR	0	616	0	0	0	0	0	616
	1985	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
	1986	GN	62	0	64	11	45	0	0	182
		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
Aransas	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
	1979	TL	3	0	1	0	0	0	0	4
		RR	0	40	0	0	0	0	0	40
	1980	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
1981	UK	3	0	3	0	1	0	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
1982		RR	0	13	0	0	0	0	0	13

Table 3. (Cont'd.)

Bay	Year	Gear ^a	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other ^b 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		
	RR	1	464	0	3	0	1	0	469		
	GN	244	107	282	62	43	2	0	740		
1982	TN	10	27	0	0	2	0	0	39		
	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		
1983	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		
	GN	62	15	74	22	36	2	0	211		
1984	BS	0	0	0	1	0	0	0	1		
	RR	1	19	0	1	0	0	0	21		
	GN	122	9	61	12	28	0	0	232		
1985	BS	0	0	0	0	3	0	0	3		
	SK	0	0	0	0	0	0	280	280		
	GN	127	2	87	4	14	1	0	235		
1986	GN	79	4	79	4	3	0	1	170		
1987	GN	90	10	96	3	10	2	0	211		
1988	BS	0	0	1	0	0	0	0	1		
	UK	0	1	0	0	0	0	0	1		
Corpus Christi	1975	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	
	1977	GN	71	1	51	34	16	1	2	176	
		TN	154	0	26	21	13	6	2	222	
	1978	GN	42	0	20	32	16	1	0	111	
		TN	226	6	88	95	27	16	3	461	
		RR	0	4	0	0	0	0	0	4	
	1979	GN	45	1	45	42	17	2	3	155	
		TN	289	89	68	56	36	11	10	559	
		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	
	1983	GN	35	10	113	0	8	0	0	166	
		RR	11	622	0	0	0	0	0	633	
	1984	GN	78	5	113	11	24	3	0	234	
		RR	2	31	0	0	0	0	0	33	
	1985	GN	142	18	39	27	29	7	0	262	
	1986	GN	124	49	115	8	41	8	0	345	
	1987	GN	113	70	85	7	19	10	0	304	
	1988	GN	119	20	190	10	17	9	0	365	

Table 3. (Cont'd.)

Bay	Year	Gear ^a	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other ^b species	All species
Upper Laguna Madre	1975	GN	31	0	129	0	6	0	0	166
	1976	GN	85	0	247	6	3	1	31	373
		TN	36	8	1	1	0	5	11	62
	1977	GN	38	3	102	5	0	0	0	148
		TN	27	0	0	0	0	0	0	27
	1978	GN	10	0	1,348	0	3	0	0	1,361
		TN	84	27	115	0	12	0	0	238
	1979	GN	2	0	49	0	0	0	0	51
		TN	111	49	47	0	2	0	0	209
	1980	GN	32	2	60	12	3	0	0	109
		TN	171	38	64	10	5	0	0	288
		RR	0	4	0	0	0	0	0	4
	1981	GN	63	12	129	0	6	0	0	210
		TN	28	27	13	0	1	0	0	69
		RR	1	314	0	0	0	0	0	315
	1982	GN	66	0	78	0	17	0	0	161
		RR	0	624	0	0	0	0	0	624
	1983	GN	40	0	41	0	12	0	0	93
		RR	0	602	0	0	0	0	0	602
	1984	GN	81	0	85	0	2	0	0	168
		TL	5	0	0	0	0	0	0	5
	1985	GN	58	0	193	0	24	0	1	276
		TL	143	9	48	0	0	0	7	207
	1986	GN	47	4	207	1	21	0	0	280
		TL	4	0	1	0	0	0	0	5
	1987	GN	77	4	208	0	3	0	0	292
	1988	GN	73	1	285	3	5	0	2	369
Lower Laguna Madre	1975	GN	32	0	72	0	13	0	0	117
	1976	GN	79	0	188	18	6	1	48	340
		TN	119	16	21	2	13	0	134	305
	1977	GN	86	0	280	9	7	0	0	382
		TN	53	2	5	1	4	0	0	65
	1978	GN	148	6	232	68	9	2	0	465
		TN	208	139	96	112	14	2	2	573
		TL	65	17	153	62	8	0	0	305
		RR	0	12	0	0	0	0	0	12
	1979	GN	66	5	104	37	12	1	0	225
		TN	117	34	36	38	9	3	21	258
		RR	0	18	0	0	0	0	0	18
	1980	GN	21	0	56	6	4	1	0	88
		TN	197	46	34	2	2	2	0	283
		RR	0	7	0	0	0	0	0	7
	1981	GN	147	2	48	4	3	1	2	207
		TN	150	165	6	6	1	0	0	328
		RR	1	300	0	0	0	0	0	301
	1982	GN	178	0	37	0	0	0	0	215
		RR	7	637	1	0	3	0	0	648
	1983	GN	87	0	7	0	5	0	3	102
		RR	9	612	0	0	0	0	0	621
	1984	GN	140	0	7	0	0	0	0	147
		TL	16	0	0	0	0	0	0	16

Table 3. (Cont'd.)

Bay	Year	Gear ^a	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other ^b species	All species
		RR	4	21	0	0	0	0	0	25
	1985	GN	137	1	77	0	1	0	1	217
		TL	212	10	76	0	0	0	0	298
	1986	GN	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	GN	82	3	168	2	19	0	5	279
		ST	0	0	0	0	1	0	0	1
	1988	GN	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
	1988	DS	3	11	8	0	0	0	3	25
		RS	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	GN	415	0	471	36	80	8	2	1,012
	1976	GN	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	GN	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	GN	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
		BS	1	0	12	2	0	0	0	15
		TL	68	17	154	62	8	0	0	309
	1979	GN	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
		BS	2	0	0	0	0	0	0	2
		FT	0	0	0	0	0	0	270	270
		UK	1	0	0	0	0	0	0	1

Table 3. (Cont'd.)

Bay	Year	Gear ^a	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other ^b 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	
	BS	2	0	0	2	1	0	0	5	
	UK	3	0	3	0	1	0	0	7	
1981	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	
	BS	4	0	1	3	0	0	0	8	
	UK	1	0	0	0	0	0	0	1	
1982	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	
	BS	1	0	1	1	2	0	0	5	
1983	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	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	
	DS	22	8	3	0	1	0	0	34	
1985	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	
	SK	0	0	0	0	0	0	280	280	
1986	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	
	SK	683	0	0	0	0	0	0	683	
	ST	0	0	2	0	2	0	0	4	
1987	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	
	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	
1988	EF	0	0	0	0	0	0	341	341	
	DS	3	21	13	0	4	0	5	46	
	GN	971	98	1,270	59	114	16	17	2,545	
	ST	0	0	6	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 ^a	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other ^b 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

^aBS = 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.

^bList 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
	1987	Sport	11	0	6	0	1	0	0	18
		TPWD	3	0	0	0	0	0	0	3
		Total	14	0	6	0	1	0	0	21
	1988	Sport	2	2	0	0	0	0	1 ^a	5
		Total	2	2	0	0	0	0	1 ^a	5
	Galveston	Unknown	Sport	1	0	0	0	0	0	1
		TPWD	1	1	0	0	0	0	0	2
		Total	2	1	0	0	0	0	0	3
	1975	Sport	2	0	0	0	0	0	0	2
		Total	2	0	0	0	0	0	0	2
	1976	Sport	15	28	3	0	1	0	1 ^a	48
		Commercial	1	0	0	0	0	0	0	1
		TPWD	1	0	1	0	0	0	0	2
		Unknown	1	3	1	0	1	0	0	6
		Total	18	31	5	0	2	0	1 ^a	57
	1977	Sport	12	20	4	0	1	0	0	37
		Commercial	0	0	2	0	0	0	0	2
		TPWD	2	0	0	0	0	0	0	2
		Unknown	3	4	1	0	0	0	0	8
		Total	17	24	7	0	1	0	0	49
	1978	Sport	25	12	3	0	5	0	0	45
		Commercial	3	0	1	0	0	0	0	4
		Total	28	12	4	0	5	0	0	49
	1979	Sport	23	5	1	1	4	0	0	34
		Commercial	4	1	1	0	1	0	0	7
		TPWD	1	0	0	0	0	0	0	1
		Unknown	2	0	1	0	0	0	0	3
		Total	30	6	3	1	5	0	0	45
	1980	Sport	51	25	0	0	1	0	0	77
		Commercial	6	1	0	1	0	0	0	8
		TPWD	1	0	0	0	0	0	0	1
		Total	58	26	0	1	1	0	0	86
	1981	Sport	13	67	3	0	0	0	0	83
		Commercial	0	2	0	0	0	0	0	2
		TPWD	1	1	0	0	0	0	0	2
		Total	14	70	3	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	1 ^a	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	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	3 ^b	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	1
		Total	109	11	1	0	0	0	1 ^b	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	1
		Total	58	5	7	0	5	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	1	1
		Unknown	2	0	2	0	0	0	1 ^b	5
		Total	28	2	4	0	1	0	12 ^b	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	19
	1977	Sport	13	0	4	0	5	0	0	22
		Commercial	9	0	19	0	2	0	0	30
		Unknown	0	0	4	0	1	0	0	5
		Total	22	0	27	0	8	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	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	9
		Commercial	4	0	0	0	1	0	0	2
		Total	10	0	0	0	1	0	0	11
	1981	Sport	6	23	5	0	1	0	0	35
		Total	6	23	5	0	1	0	0	35
	1982	Sport	7	26	4	1	1	0	0	39
		TPWD	0	0	1	0	0	0	0	1
		Unknown	0	1	0	0	0	0	0	1
		Total	7	27	5	1	1	0	0	41
	1983	Sport	7	37	1	0	0	0	0	45
		Commercial	0	1	0	0	0	0	0	1
		TPWD	0	1	0	0	0	0	0	1
		Total	7	39	1	0	0	0	0	47
	1984	Sport	11	6	1	0	0	0	0	18
		TPWD	0	0	2	0	0	0	0	2
		Total	11	6	3	0	0	0	0	20
	1985	Sport	2	2	1	2	0	0	0	7
		Total	2	2	1	2	0	0	0	7
	1986	Sport	9	0	5	1	1	0	0	16
		TPWD	1	0	0	0	0	0	0	1
		Total	10	0	5	1	1	0	0	17
	1987	Sport	18	0	2	0	2	0	0	22
		TPWD	1	0	0	1	0	0	0	2
		Total	19	0	2	1	2	0	0	24
	1988	Sport	8	1	2	0	1	0	0	12
		TPWD	2	0	1	0	0	0	0	3
		Total	10	1	3	0	1	0	0	15
Matagorda	Unknown	Sport	0	0	1	0	0	0	0	1
		TPWD	1	0	0	0	0	0	0	1
		Total	1	0	1	0	0	0	0	2
	1975	Sport	1	0	0	0	0	0	0	1
		Total	1	0	0	0	0	0	0	1
	1976	Sport	26	0	9	0	3	1	0	39
		Commercial	16	0	6	0	0	0	0	22
		TPWD	1	0	0	0	0	0	0	1
		Unknown	1	0	0	0	0	0	0	1
		Total	44	0	15	0	3	1	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	0	82
	Commercial	14	0	12	0	0	0	0	0	26
	TPWD	3	0	3	0	0	0	0	0	6
	Unknown	5	0	3	0	0	0	0	0	8
	Total	85	0	33	1	3	0	0	0	122
1978	Sport	88	11	24	0	2	0	0	0	125
	Commercial	35	0	15	1	0	0	0	0	51
	TPWD	13	0	5	0	0	0	0	0	18
	Unknown	10	0	7	0	0	0	0	0	17
	Total	146	11	51	1	2	0	0	0	211
1979	Sport	92	5	8	1	1	0	0	0	107
	Commercial	18	0	9	0	0	0	0	0	27
	TPWD	6	1	1	0	0	0	0	0	8
	Unknown	0	0	0	0	1	0	0	0	1
	Total	116	6	18	1	2	0	0	0	143
1980	Sport	100	1	2	1	0	0	0	0	104
	Commercial	6	0	2	0	0	0	0	0	8
	Unknown	1	0	1	0	0	0	0	0	2
	Total	107	1	5	1	0	0	0	0	114
1981	Sport	40	23	1	1	0	0	0	0	65
	Commercial	2	0	0	0	0	0	0	0	2
	TPWD	4	0	0	0	0	0	0	0	4
	Total	46	23	1	1	0	0	0	0	71
1982	Sport	18	46	1	0	0	0	0	0	65
	TPWD	0	0	1	0	0	0	0	0	1
	Unknown	0	1	0	0	0	0	0	0	1
	Total	18	47	2	0	0	0	0	0	67
1983	Sport	10	41	1	0	0	0	0	0	52
	TPWD	1	0	0	0	0	0	0	0	1
	Total	11	41	1	0	0	0	0	0	53
1984	Sport	11	37	4	0	1	0	0	0	53
	Unknown	1	1	0	0	0	0	0	0	2
	Total	12	38	4	0	1	0	0	0	55
1985	Sport	8	10	6	1	1	0	0	0	26
	TPWD	0	0	1	0	0	0	0	0	1
	Sport/survey	1	0	0	0	0	0	0	0	1
	Total	9	10	7	1	1	0	0	0	28
1986	Sport	25	2	1	1	1	0	0	0	30
	TPWD	0	0	0	1	0	0	0	0	1
	Total	25	2	1	2	1	0	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
	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	25
		Total	21	0	6	0	0	0	0	25
San Antonio	Unknown	Sport	18	0	5	0	0	0	1	24
		Total	18	0	5	0	0	0	1 ^c	24
	1975	Sport	0	0	1	0	0	0	0	1
		Total	0	0	1	0	0	0	0	1
	1976	Sport	23	0	1	2	0	2	0	28
		Commercial	13	0	1	1	0	0	0	15
		TPWD	2	0	0	0	0	0	0	2
		Unknown	5	0	1	0	0	0	0	6
		Total	43	0	3	3	0	2	0	51
	1977	Sport	14	0	3	0	4	0	0	21
		Commercial	34	0	10	0	1	0	0	45
		TPWD	5	0	2	0	0	0	0	7
		Unknown	3	0	2	0	1	0	0	6
		Total	56	0	17	0	6	0	0	79
	1978	Sport	33	0	6	0	3	0	0	42
		Commercial	23	0	6	0	0	0	0	29
		TPWD	4	0	0	0	0	0	0	4
		Unknown	6	0	1	0	0	0	0	7
		Total	66	0	13	0	3	0	0	82
	1979	Sport	51	0	2	1	5	0	0	59
		Commercial	28	0	3	1	1	0	0	33
		TPWD	5	0	1	1	0	0	0	7
		Total	84	0	6	3	6	0	0	99
	1980	Sport	42	0	3	2	2	0	0	49
		Commercial	9	0	1	0	0	0	0	10
		TPWD	2	0	1	0	0	0	0	3
		Total	53	0	5	2	2	0	0	62
	1981	Sport	23	11	2	2	0	0	0	38
		Commercial	1	0	0	0	0	0	0	1
		TPWD	2	0	1	0	0	0	0	3
		Unknown	1	0	0	0	0	0	0	1
		Total	27	11	3	2	0	0	0	43
	1982	Sport	8	15	3	4	0	0	0	30
		Commercial	0	0	2	0	0	0	0	2
		TPWD	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
	1983	Sport	5	36	0	2	0	0	0	43
		TPWD	0	1	0	0	0	0	0	1
		Total	5	37	0	2	0	0	0	44
	1984	Sport	11	2	1	0	4	0	0	18
		Total	11	2	1	0	4	0	0	18
	1985	Sport	11	1	2	0	0	0	0	14
		TPWD	1	0	0	0	0	0	0	1
		Total	12	1	2	0	0	0	0	15
	1986	Sport	19	0	2	0	2	0	0	23
		Sport/survey	1	0	0	0	0	0	0	1
		Total	20	0	2	0	2	0	0	24
	1987	Sport	22	4	3	0	2	0	0	31
		Commercial	1	0	2	0	0	0	0	3
		TPWD	1	0	0	0	0	0	0	1
		Total	24	4	5	0	2	0	0	35
	1988	Sport	14	1	3	0	0	1	0	19
		TPWD	5	0	0	0	0	0	0	5
		Total	19	1	3	0	0	1	0	24
Aransas	Unknown	Sport	1	0	0	0	0	0	0	1
		TPWD	5	0	0	0	0	0	0	5
		Unknown	1	0	0	1	0	0	0	2
		Total	7	0	0	1	0	0	0	8
	1976	Sport	35	0	17	4	1	0	0	57
		Commercial	22	0	8	0	0	1	0	31
		TPWD	0	0	0	0	0	0	2	2
		Unknown	2	0	0	1	1	0	0	4
		Total	59	0	25	5	2	1	2	94
	1977	Sport	33	0	14	4	0	0	0	51
		Commercial	16	1	12	1	0	0	0	30
		TPWD	2	0	0	0	0	0	0	2
		Unknown	1	0	1	0	0	0	0	2
		Total	52	1	27	5	0	0	0	85
	1978	Sport	57	2	7	5	3	0	0	74
		Commercial	54	0	14	1	0	0	0	69
		TPWD	1	0	2	0	0	0	0	3
		Unknown	2	0	0	0	0	0	0	2
		Total	114	2	23	6	3	0	0	148
	1979	Sport	74	5	16	7	1	0	0	103
		Commercial	51	1	6	0	0	0	0	58
		TPWD	1	0	2	0	0	1	0	4
		Total	126	6	24	7	1	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	0	212
	Commercial	71	4	8	1	2	0	0	0	86
	TPWD	40	0	1	0	0	0	0	0	41
	Unknown	3	0	0	0	0	0	0	0	3
	Total	285	21	28	4	4	0	0	0	342
1981	Sport	124	36	11	5	3	0	0	0	179
	Commercial	35	8	4	0	1	0	0	0	48
	TPWD	25	1	0	0	0	0	0	0	26
	Total	184	45	15	5	4	0	0	0	253
1982	Sport	83	51	18	5	1	0	0	0	158
	Commercial	12	2	7	0	0	0	0	0	21
	TPWD	2	1	2	0	0	0	0	0	5
	Unknown	1	0	0	0	0	0	0	0	1
	Total	98	54	27	5	1	0	0	0	185
1983	Sport	23	50	6	4	0	0	0	0	83
	Commercial	1	0	0	0	2	0	0	0	3
	TPWD	1	2	2	1	0	0	0	0	6
	Total	25	52	8	5	2	0	0	0	92
1984	Sport	10	2	1	0	2	0	0	0	15
	Commercial	0	0	1	0	0	0	0	0	1
	TPWD	0	3	0	0	0	0	0	0	3
	Total	10	5	2	0	2	0	0	0	19
1985	Sport	16	1	3	1	1	0	0	0	22
	TPWD	0	0	1	0	0	0	0	0	1
	Sport/survey	2	0	0	0	0	0	0	0	2
	Total	18	1	4	1	1	0	0	0	25
1986	Sport	18	2	6	0	0	0	0	0	26
	Commercial	1	0	1	0	1	0	0	0	3
	TPWD	0	0	2	0	0	0	0	0	2
	Sport/survey	1	0	0	0	0	0	0	0	1
	Total	20	2	9	0	1	0	0	0	32
1987	Sport	35	1	7	0	0	0	0	0	43
	Commercial	0	0	1	0	0	0	0	0	1
	Total	35	1	8	0	0	0	0	0	44
1988	Sport	10	0	4	1	0	0	0	0	15
	Commercial	0	0	1	0	0	0	0	0	1
	Total	10	0	5	1	0	0	0	0	16
Corpus Christi	Unknown	Unknown	0	0	1	0	0	0	0	1
	Total	0	0	1	0	0	0	0	0	1
1975	Commercial	1	0	0	0	1	0	0	0	2
	Total	1	0	0	0	1	0	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 ^e	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 ^f	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
	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	20
		Commercial	0	0	1	0	0	0	0	1
		Total	12	4	3	1	1	0	0	21
	1988	Sport	9	1	1	0	0	0	0	11
		Commercial	0	0	1	0	0	0	0	1
		Total	9	1	2	0	0	0	0	12
Upper Laguna Madre	1975	Commercial	0	0	0	0	1	0	0	1
	Total	0	0	0	0	0	1	0	0	1
	1976	Sport	10	0	2	0	1	0	0	13
		Commercial	13	0	4	0	0	0	1	18
		Unknown	1	0	0	0	0	0	0	1
		Total	24	0	6	0	1	0	1 ^e	32
	1977	Sport	7	0	2	0	0	0	0	9
		Commercial	21	0	14	0	0	0	0	35
		TPWD	1	0	0	0	0	0	0	1
		Total	29	0	16	0	0	0	0	45
	1978	Sport	8	0	9	0	1	0	0	18
		Commercial	15	3	18	0	0	0	0	36
		Unknown	0	0	1	0	0	0	0	1
		Total	23	3	28	0	1	0	0	55
	1979	Sport	5	1	7	0	0	0	0	13
		Commercial	17	1	59	0	1	0	0	78
		TPWD	1	0	0	0	0	0	0	1
		Unknown	1	0	1	0	0	0	0	2
		Total	24	2	67	0	1	0	0	94
	1980	Sport	17	0	4	0	2	0	0	23
		Commercial	19	1	25	0	0	0	0	45
		TPWD	3	0	0	0	0	0	0	3
		Unknown	0	0	1	0	0	0	0	1
		Total	39	1	30	0	2	0	0	72
	1981	Sport	15	12	1	0	1	0	0	29
		Commercial	12	0	8	0	0	0	0	20
		TPWD	0	1	0	0	0	0	0	1
		Total	27	13	9	0	1	0	0	50
	1982	Sport	6	31	1	0	0	0	0	38
		Commercial	0	0	1	0	0	0	0	1
		Total	6	31	2	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	1
		Unknown	1	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	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
Lower Laguna Madre	Unknown	Unknown	0	1	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	0	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	0	65
1978	Sport	17	4	9	0	1	1	0	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	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	0	1 ^a	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	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	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	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	2	8
		Unknown	14	3	2	1	2	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	237
		TPWD	15	0	6	1	0	0	1	23
		Unknown	12	4	13	0	2	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	340
		TPWD	20	0	8	0	1	0	0	29
		Unknown	21	0	10	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	284
		TPWD	17	2	4	2	1	1	0	27
		Unknown	4	0	2	0	1	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	57
		Unknown	5	0	2	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	118
		TPWD	38	4	2	0	0	0	0	44
		Unknown	2	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	28
		TPWD	4	2	5	0	0	0	0	11
		Unknown	1	3	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	6
		TPWD	14	7	2	1	0	0	0	24
		Sport/survey	0	1	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	1	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	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	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	309
	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	285
	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	1	10
		Unknown	2	0	2	0	0	0	1	5
		Total	116	7	21	1	2	1	13	161
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	1
		Unknown	68	13	32	2	5	0	1	121
		Total	3,934	1,347	845	110	153	8	47	6,444

^aAtlantic croaker^bStriped bass^cTarpon^dSpot^eHardhead catfish^fRed snapper^gStriped 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	10
	1987	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	1
		Unknown	1	0	1	0	0	0	0	2
		Total	14	0	6	0	1	0	0	21
	1988	Same bay	2	0	0	0	0	0	0	2
		TTS	0	2	0	0	0	0	1	3
		Total	2	2	0	0	0	0	1 ^a	5
Galveston	Unknown	Same bay	1	1	0	0	0	0	0	2
		TTS	1	0	0	0	0	0	0	1
		Total	2	1	0	0	0	0	0	3
	1975	Same bay	2	0	0	0	0	0	0	2
		Total	2	0	0	0	0	0	0	2
	1976	Same bay	16	29	5	0	2	0	1	53
		Other bay	1	0	0	0	0	0	0	1
		TTS	1	1	0	0	0	0	0	2
		Unknown	0	1	0	0	0	0	0	1
		Total	18	31	5	0	2	0	1 ^a	57
	1977	Same bay	16	18	6	0	1	0	0	41
		TTS	1	6	1	0	0	0	0	8
		Total	17	24	7	0	1	0	0	49
	1978	Same bay	26	10	4	0	4	0	0	44
		TTS	2	2	0	0	1	0	0	5
		Total	28	12	4	0	5	0	0	49
	1979	Same bay	28	4	3	1	4	0	0	40
		Other bay	0	1	0	0	1	0	0	2
		TTS	1	1	0	0	0	0	0	2
		Unknown	1	0	0	0	0	0	0	1
		Total	30	6	3	1	5	0	0	45
1980	Same bay	55	25	0	1	1	0	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	13	65	3	0	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

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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	27	91	0	0	1	0	0	119
		TTs	4	17	0	0	0	0	0	21
		Total	31	108	0	0	1	0	0	140
	1983	Same bay	58	58	1	0	0	0	0	117
		TTs	10	8	0	0	0	0	0	18
		Unknown	0	1	0	0	0	0	1	2
		Total	68	67	1	0	0	0	1 ^a	137
	1984	Same bay	43	24	0	0	0	0	0	67
		Other bay	1	1	0	0	0	0	0	2
		TTs	10	3	0	0	0	0	0	13
		Total	54	28	0	0	0	0	0	82
	1985	Same bay	66	9	3	1	4	0	3	86
		TTs	6	1	0	0	0	0	0	7
		Total	72	10	3	1	4	0	3 ^b	93
	1986	Same bay	98	10	0	0	0	0	1	109
		TTs	10	1	0	0	0	0	0	11
		Outside TTS	1	0	0	0	0	0	0	1
		Unknown	0	0	1	0	0	0	0	1
		Total	109	11	1	0	0	0	1 ^b	122
	1987	Same bay	43	4	6	0	3	0	0	56
		TTs	7	1	1	0	0	0	0	9
		Outside TTS	3	0	0	0	0	0	0	3
		Unknown	5	0	0	0	2	0	0	7
		Total	58	5	7	0	5	0	0	75
	1988	Same bay	26	1	4	0	1	0	6	38
		Other bay	0	0	0	0	0	0	6	6
		TTs	1	1	0	0	0	0	0	2
		Outside TTS	1	0	0	0	0	0	0	1
		Total	28	2	4	0	1	0	12 ^b	47
East Matagorda	1976	Same bay	13	0	5	0	0	0	0	18
		Unknown	0	0	1	0	0	0	0	1
		Total	13	0	6	0	0	0	0	19
	1977	Same bay	19	0	25	0	7	0	0	51
		Other bay	2	0	2	0	1	0	0	5
		TTs	1	0	0	0	0	0	0	1
		Total	22	0	27	0	8	0	0	57
	1978	Same bay	9	0	12	1	2	0	0	24
		Other bay	0	0	3	0	1	0	0	4
		TTs	2	0	0	0	0	0	0	2
		Total	11	0	15	1	3	0	0	30

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	13
		Other bay	0	0	0	0	1	0	0	1
		TTS	0	0	1	0	0	0	0	1
		Total	5	0	6	2	2	0	0	15
	1980	Same bay	7	0	0	0	0	0	0	7
		Other bay	1	0	0	0	1	0	0	2
		TTS	2	0	0	0	0	0	0	2
		Total	10	0	0	0	1	0	0	11
	1981	Same bay	5	16	4	0	1	0	0	26
		Other bay	1	6	1	0	0	0	0	8
		TTS	0	1	0	0	0	0	0	1
		Total	6	23	5	0	1	0	0	35
	1982	Same bay	4	24	4	0	1	0	0	33
		Other bay	0	2	1	1	0	0	0	4
		TTS	3	0	0	0	0	0	0	3
		Unknown	0	1	0	0	0	0	0	1
		Total	7	27	5	1	1	0	0	41
	1983	Same bay	7	29	1	0	0	0	0	37
		Other bay	0	4	0	0	0	0	0	4
		TTS	0	6	0	0	0	0	0	6
		Total	7	39	1	0	0	0	0	47
	1984	Same bay	6	4	3	0	0	0	0	13
		Other bay	3	1	0	0	0	0	0	4
		TTS	2	1	0	0	0	0	0	3
		Total	11	6	3	0	0	0	0	20
	1985	Same bay	1	1	0	0	0	0	0	2
		Other bay	0	1	0	1	0	0	0	2
		TTS	1	0	1	1	0	0	0	3
		Total	2	2	1	2	0	0	0	7
	1986	Same bay	8	0	1	1	1	0	0	11
		Other bay	1	0	3	0	0	0	0	6
		TTS	1	0	1	0	0	0	0	2
		Total	10	0	5	1	1	0	0	17
	1987	Same bay	17	0	1	1	2	0	0	21
		Other bay	0	0	1	0	0	0	0	1
		TTS	2	0	0	0	0	0	0	2
		Total	19	0	2	1	2	0	0	24
	1988	Same bay	8	1	2	0	1	0	0	12
		Other bay	2	0	1	0	0	0	0	3
		Total	10	1	3	0	1	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	Same bay	1	0	0	0	0	0	0	1
		Total	1	0	1	0	0	0	0	2
	1975	Same bay	1	0	0	0	0	0	0	1
		Total	1	0	0	0	0	0	0	1
	1976	Same bay	43	0	14	0	3	1	0	61
		Other bay	1	0	1	0	0	0	0	2
		Total	44	0	15	0	3	1	0	63
	1977	Same bay	82	0	30	1	3	0	0	116
		Other bay	2	0	1	0	0	0	0	3
		TTS	0	0	1	0	0	0	0	1
		Unknown	1	0	1	0	0	0	0	2
		Total	85	0	33	1	3	0	0	122
	1978	Same bay	127	11	41	0	2	0	0	181
		Other bay	9	0	4	1	0	0	0	14
		TTS	1	0	1	0	0	0	0	2
		Unknown	9	0	5	0	0	0	0	14
		Total	146	11	51	1	2	0	0	211
	1979	Same bay	102	6	14	1	1	0	0	124
		Other bay	3	0	1	0	0	0	0	4
		TTS	4	0	3	0	0	0	0	7
		Unknown	7	0	0	0	1	0	0	8
		Total	116	6	18	1	2	0	0	143
	1980	Same bay	95	1	4	0	0	0	0	100
		Other bay	4	0	0	0	0	0	0	4
		TTS	5	0	1	1	0	0	0	7
		Unknown	3	0	0	0	0	0	0	3
		Total	107	1	5	1	0	0	0	114
	1981	Same bay	45	21	1	1	0	0	0	68
		TTS	1	2	0	0	0	0	0	3
		Total	46	23	1	1	0	0	0	71
	1982	Same bay	12	44	2	0	0	0	0	58
		Other bay	1	1	0	0	0	0	0	2
		TTS	5	2	0	0	0	0	0	7
		Total	18	47	2	0	0	0	0	67
	1983	Same bay	11	36	1	0	0	0	0	48
		Other bay	0	3	0	0	0	0	0	3
		TTS	0	1	0	0	0	0	0	1
		Unknown	0	1	0	0	0	0	0	1
		Total	11	41	1	0	0	0	0	53

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	31
		Other bay	4	10	0	0	0	0	0	14
		TTS	3	6	1	0	0	0	0	10
		Total	12	38	4	0	1	0	0	55
	1985	Same bay	5	6	6	0	1	0	0	18
		Other bay	0	2	0	1	0	0	0	3
		TTS	4	2	1	0	0	0	0	7
		Total	9	10	7	1	1	0	0	28
	1986	Same bay	21	0	1	2	0	0	0	24
		Other bay	1	1	0	0	0	0	0	2
		TTS	2	1	0	0	0	0	0	3
		Unknown	1	0	0	0	1	0	0	2
		Total	25	2	1	2	1	0	0	31
	1987	Same bay	19	0	1	0	1	0	0	21
		Other bay	1	0	0	0	0	0	0	1
		TTS	2	0	0	1	0	0	0	3
		Unknown	2	0	0	0	1	0	0	3
		Total	24	0	1	1	2	0	0	28
	1988	Same bay	15	0	4	0	0	0	0	19
		Other bay	1	0	0	0	0	0	0	1
		TTS	2	0	0	0	0	0	0	2
		Unknown	3	0	0	0	0	0	0	3
		Total	21	0	4	0	0	0	0	25
San Antonio	Unknown	Same bay	1	0	0	0	0	0	0	1
		Unknown	17	0	5	0	0	0	1	23
		Total	18	0	5	0	0	0	1	24
	1975	Same bay	0	0	1	0	0	0	0	1
		Total	0	0	1	0	0	0	0	1
	1976	Same bay	40	0	3	1	0	2	0	46
		Other bay	2	0	0	2	0	0	0	4
		TTS	1	0	0	0	0	0	0	1
		Total	43	0	3	3	0	2	0	51
	1977	Same bay	50	0	11	0	3	0	0	64
		Other bay	1	0	4	0	2	0	0	7
		TTS	1	0	0	0	0	0	0	1
		Unknown	4	0	2	0	1	0	0	7
		Total	56	0	17	0	6	0	0	79
	1978	Same bay	57	0	8	0	3	0	0	68
		Other bay	6	0	3	0	0	0	0	9
		TTS	2	0	0	0	0	0	0	2
		Outside TTS	1	0	0	0	0	0	0	1
		Unknown	0	0	2	0	0	0	0	2
		Total	66	0	13	0	3	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
		Total	5	37	0	2	0	0	0	44
	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
	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
Aransas	Unknown	Same bay	0	0	0	1	0	0	0	1
		Other bay	1	0	0	0	0	0	0	1
		Unknown	6	0	0	0	0	0	0	6
		Total	7	0	0	1	0	0	0	8
	1976	Same bay	56	0	23	2	1	1	0	83
		Other bay	1	0	2	2	1	0	0	6
		TTs	1	0	0	1	0	0	0	2
		Unknown	1	0	0	0	0	0	2	3
		Total	59	0	25	5	2	1	2 ^d	94
	1977	Same bay	49	1	23	4	0	0	0	77
		Other bay	2	0	3	0	0	0	0	5
		TTs	0	0	0	1	0	0	0	1
		Unknown	1	0	1	0	0	0	0	2
		Total	52	1	27	5	0	0	0	85
	1978	Same bay	101	2	16	5	3	0	0	127
		Other bay	5	0	3	1	0	0	0	9
		TTs	1	0	0	0	0	0	0	1
		Unknown	7	0	4	0	0	0	0	11
		Total	114	2	23	6	3	0	0	148
	1979	Same bay	106	4	18	4	1	1	0	134
		Other bay	7	2	2	0	0	0	0	11
		TTs	5	0	1	3	0	0	0	9
		Unknown	8	0	3	0	0	0	0	11
		Total	126	6	24	7	1	1	0	165
	1980	Same bay	245	18	21	3	2	0	0	289
		Other bay	12	2	3	1	0	0	0	18
		TTs	6	0	1	0	1	0	0	8
		Unknown	22	1	3	0	1	0	0	27
		Total	285	21	28	4	4	0	0	342
	1981	Same bay	141	36	9	2	2	0	0	190
		Other bay	4	0	2	2	1	0	0	9
		TTs	7	1	0	1	0	0	0	9
		Unknown	32	8	4	0	1	0	0	45
		Total	184	45	15	5	4	0	0	253
	1982	Same bay	87	48	23	2	0	0	0	160
		Other bay	2	6	2	1	0	0	0	11
		TTs	9	0	2	2	1	0	0	14
		Total	98	54	27	5	1	0	0	185

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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	2	0	1	0	0	0	5
		Total	25	52	8	5	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	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	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
Corpus Christi	Unknown	TTS	0	0	1	0	0	0	0	1
		Total	0	0	1	0	0	0	0	1
	1975	Same bay	1	0	0	0	1	0	0	2
		Total	1	0	0	0	1	0	0	2
	1976	Same bay	23	0	2	2	2	0	0	29
		Other bay	5	0	1	0	0	0	0	6
		Total	28	0	3	2	2	0	0	35
	1977	Same bay	38	2	8	4	2	0	1	55
		Other bay	8	0	1	2	1	0	0	12
		TTS	1	0	0	0	0	0	0	1
		Unknown	1	0	0	0	0	0	0	1
		Total	48	2	9	6	3	0	1 ^e	69
	1978	Same bay	60	0	7	3	5	0	0	75
		Other bay	13	0	6	0	0	0	0	19
		TTS	0	0	0	2	0	0	0	2
		Unknown	9	0	2	1	0	0	0	12
		Total	82	0	15	6	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 ^f	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

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Table 5. (Cont'd.)

Bay	Return year	Return location	Red drum	Spotted seatrout	Black drum	Sheepshead	Southern flounder	Gulf flounder	Other species	All species
	1988	Same bay	9	1	1	0	0	0	0	11
		Other bay	0	0	1	0	0	0	0	1
		Total	9	1	2	0	0	0	0	12
Upper Laguna Madre	1975	Same bay	0	0	0	0	1	0	0	1
		Total	0	0	0	0	1	0	0	1
	1976	Same bay	15	0	6	0	1	0	1	23
		Other bay	7	0	0	0	0	0	0	7
		TTs	1	0	0	0	0	0	0	1
		Outside TTS	1	0	0	0	0	0	0	1
		Total	24	0	6	0	1	0	1 ^e	32
	1977	Same bay	22	0	13	0	0	0	0	35
		Other bay	6	0	3	0	0	0	0	9
		Unknown	1	0	0	0	0	0	0	1
		Total	29	0	16	0	0	0	0	45
	1978	Same bay	17	3	14	0	0	0	0	34
		Other bay	3	0	6	0	1	0	0	10
		Unknown	34	0	8	0	0	0	0	11
		Total	23	3	28	0	1	0	0	55
	1979	Same bay	23	2	61	0	1	0	0	87
		Other bay	1	0	5	0	0	0	0	6
		Unknown	0	0	1	0	0	0	0	1
		Total	24	2	67	0	1	0	0	94
	1980	Same bay	28	1	26	0	2	0	0	57
		Other bay	6	0	1	0	0	0	0	7
		Unknown	5	0	3	0	0	0	0	8
		Total	39	1	30	0	2	0	0	72
	1981	Same bay	21	10	8	0	1	0	0	40
		Other bay	1	3	0	0	0	0	0	4
		TTs	2	0	0	0	0	0	0	2
		Unknown	3	0	1	0	0	0	0	4
		Total	27	13	9	0	1	0	0	50
	1982	Same bay	5	31	1	0	0	0	0	37
		Other bay	1	0	1	0	0	0	0	2
		Total	6	31	2	0	0	0	0	39
	1983	Same bay	5	40	0	0	0	0	0	45
		Other bay	1	7	0	0	0	0	0	8
		TTs	1	0	0	0	0	0	0	1
		Total	7	47	0	0	0	0	0	54
	1984	Other bay	1	0	0	0	0	0	0	1
		Total	1	0	0	0	0	0	0	1

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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	16	0	2	0	0	0	0	18
		Other bay	3	0	0	0	0	0	0	3
		Total	19	0	2	0	0	0	0	21
	1986	Same bay	10	0	0	0	0	0	0	10
		Other bay	0	1	0	0	0	0	0	1
		TTS	0	0	1	0	0	0	0	1
		Total	10	1	1	0	0	0	0	12
	1987	Same bay	2	1	1	0	0	0	0	4
		Other bay	1	0	0	0	0	0	0	1
		Total	3	1	1	0	0	0	0	5
	1988	Same bay	6	0	0	0	0	0	0	6
		Other bay	1	0	0	0	0	0	0	1
		Total	7	0	0	0	0	0	0	7
Lower Laguna Madre	Unknown	Unknown	0	1	0	0	0	0	0	1
		Total	0	1	0	0	0	0	0	1
	1976	Same bay	30	0	7	0	0	0	1	38
		Total	30	0	7	0	0	0	1 ^a	38
	1977	Same bay	40	1	12	1	1	0	0	55
		Other bay	0	0	3	0	0	0	0	3
		TTS	1	0	0	0	0	0	0	1
		Outside TTS	1	0	1	0	0	0	0	2
		Unknown	2	0	2	0	0	0	0	4
		Total	44	1	18	1	1	0	0	65
	1978	Same bay	75	5	19	1	1	0	0	101
		Other bay	0	0	3	0	0	0	0	3
		TTS	0	0	1	0	0	0	0	1
		Outside TTS	0	0	0	0	0	1	0	1
		Unknown	0	0	3	0	0	0	0	3
		Total	75	5	26	1	1	1	0	109
	1979	Same bay	34	11	12	2	0	0	0	59
		Other bay	3	0	3	1	0	0	0	7
		Outside TTS	0	0	0	1	0	0	0	1
		Unknown	6	0	3	0	0	0	0	9
		Total	43	11	18	4	0	0	0	76
	1980	Same bay	13	4	3	0	0	0	1	21
		Other bay	1	1	1	1	0	0	0	4
		Total	14	5	4	1	0	0	1 ^a	25
	1981	Same bay	22	12	1	0	0	0	0	35
		Other bay	3	1	0	0	0	0	0	4
		TTS	1	0	0	0	0	0	0	1
		Outside TTS	0	0	1	0	0	0	0	1
		Total	26	13	2	0	0	0	0	41

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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	50
		Other bay	1	5	0	0	0	0	0	6
		TTs	3	0	0	0	0	0	0	3
		Total	22	35	2	0	0	0	0	59
	1983	Same bay	10	54	0	0	0	0	0	64
		Other bay	0	3	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	Same bay	10	7	0	0	0	0	0	17
		Total	10	7	0	0	0	0	0	17
	1985	Same bay	22	3	0	0	0	0	0	25
		Other bay	1	2	0	0	0	0	0	3
		Unknown	1	0	0	0	0	0	0	1
		Total	24	5	0	0	0	0	0	29
	1986	Same bay	32	1	5	0	0	0	0	38
		Other bay	0	1	0	0	0	0	0	1
		Total	32	2	5	0	0	0	0	39
	1987	Same bay	24	0	2	0	1	0	0	27
		Unknown	4	0	0	0	1	0	0	5
		Total	28	0	2	0	2	0	0	32
	1988	Same bay	8	0	0	0	0	0	0	8
		Other bay	1	0	0	0	0	0	0	1
		Outside TTS	1	0	0	0	0	0	0	1
		Total	10	0	0	0	0	0	0	10
Coastwide	Unknown	Same bay	2	1	0	1	0	0	0	4
		Other bay	1	0	1	0	0	0	0	2
		TTs	1	0	1	0	0	0	0	2
		Unknown	24	1	5	0	0	0	1	31
		Total	28	2	7	1	0	0	1	39
	1975	Same bay	4	0	1	0	2	0	0	7
		Total	4	0	1	0	2	0	0	7
	1976	Same bay	236	29	65	5	9	4	3	351
		Other bay	17	0	4	4	1	0	0	26
		TTs	4	1	0	1	0	0	0	6
		Outside TTS	1	0	0	0	0	0	0	1
		Unknown	1	1	1	0	0	0	2	5
		Total	259	31	70	10	10	4	5	389

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	316	22	128	10	17	0	1	494
		Other bay	21	0	17	2	4	0	0	44
		TTs	5	6	2	1	0	0	0	14
		Outside TTS	1	0	1	0	0	0	0	2
		Unknown	10	0	6	0	1	0	0	17
		Total	353	28	154	13	22	0	1	571
	1978	Same bay	472	31	121	10	20	0	0	654
		Other bay	36	0	28	2	2	0	0	68
		TTs	8	2	2	2	1	0	0	15
		Outside TTS	1	0	0	0	0	1	0	2
		Unknown	28	0	24	1	0	0	0	53
		Total	545	33	175	15	23	1	0	792
	1979	Same bay	405	28	118	13	18	1	0	583
		Other bay	31	3	14	1	3	0	0	52
		TTs	12	1	5	3	0	0	18	39
		Outside TTS	2	0	0	1	0	0	3	6
		Unknown	32	0	8	1	2	0	0	43
		Total	482	32	145	19	23	1	21	723
	1980	Same bay	545	56	61	8	10	0	1	681
		Other bay	31	5	7	3	1	0	0	47
		TTs	21	1	2	1	1	0	0	26
		Unknown	52	4	9	0	2	0	0	67
		Total	649	66	79	12	14	0	1	821
	1981	Same bay	289	185	28	4	5	0	0	511
		Other bay	18	15	5	3	1	0	0	42
		TTs	15	7	0	1	0	0	0	23
		Outside TTS	0	0	1	0	0	0	0	1
		Unknown	65	12	5	0	4	0	0	86
		Total	387	219	39	8	10	0	0	663
	1982	Same bay	167	322	39	3	3	0	0	534
		Other bay	10	23	7	2	0	0	0	42
		TTs	27	21	2	5	1	0	0	56
		Unknown	1	2	0	0	0	0	0	3
		Total	205	358	48	10	4	0	0	635
	1983	Same bay	126	339	11	5	2	0	0	483
		Other bay	3	40	2	1	1	0	0	47
		TTs	13	18	0	2	0	0	0	33
		Unknown	0	3	0	0	0	0	1	4
		Total	142	400	13	8	3	0	1	567
	1984	Same bay	91	66	6	0	5	1	0	169
		Other bay	13	14	2	0	3	0	0	32
		TTs	18	10	2	0	0	0	0	30
		Outside TTS	1	0	0	0	0	0	0	1
		Total	123	90	10	0	8	1	0	232

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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 ^a	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

^aAtlantic croaker^bStriped bass^cTarpon^dSpot^eHardhead catfish^fRed snapper^gStriped 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 amount paid \$
		\$1	\$5	\$10	\$25	Total	
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
	1987	20	1	2	1	24	70
	1988	13	2	0	0	15	23
Matagorda	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 amount paid \$
		\$1	\$5	\$10	\$25	Total	
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.





