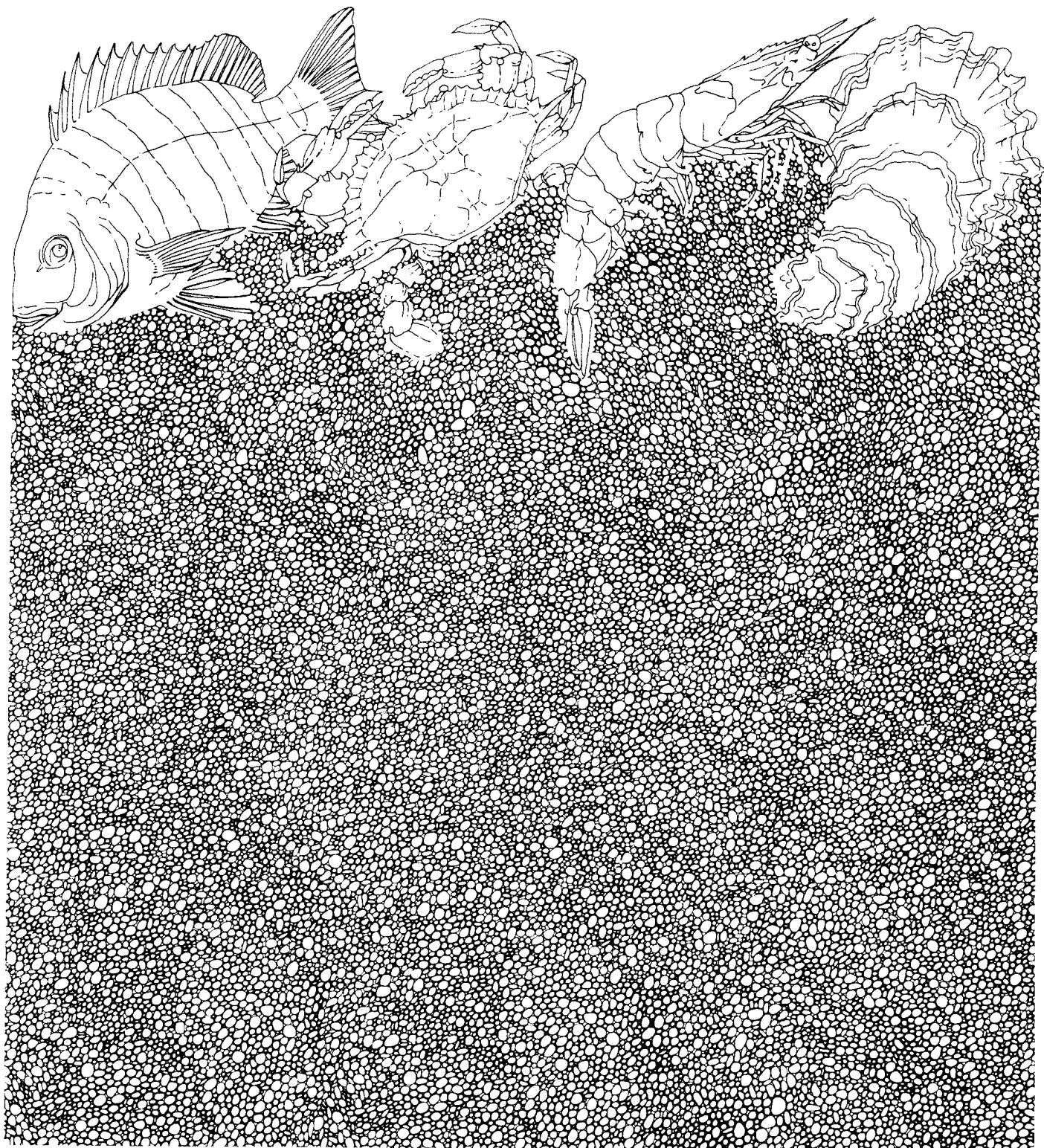


Trends in Texas Commercial Fishery Landings, 1977-1986

by Hal R. Osburn, William D. Quast and C. L. Hamilton

Management Data Series Number 131
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ABSTRACT

The Texas Parks and Wildlife Department in cooperation with the National Marine Fisheries Service collects data on commercially landed finfish and shellfish from Texas bays and from the Gulf of Mexico off Texas.

Shrimp continue to be the most important commercial seafood product landed in Texas. They represented an average 84%, by weight, of all seafood landed from 1977 through 1986 and more than 93% of the total ex-vessel value. The remaining landings were comprised of blue crabs (9%), Eastern oysters (4%) and finfish (4%). The remaining ex-vessel value resulted from the sale of Eastern oysters (3%), blue crabs (2%) and finfish (2%). Since 1977, the mean price per pound paid to commercial fishermen for most shrimp has increased by 158%, while finfish prices increased 114%, Eastern oysters increased 58% and blue crabs increased 27%.

The total reported landings for 1986 established a new record for annual landings at 116 million pounds with a record reported ex-vessel value of \$246 million.

INTRODUCTION

Gulland (1977) emphasized the importance to the fishery manager of knowing the landings of a marine resource. Landings data from both recreational and commercial fishermen are required to assess the needs for and the impacts of saltwater fishing regulations. Economic and sociologic information can also be inferred from landings data to allow for management based on the concept of optimum sustainable yield (Radovich 1975). Annual recreational fish landings in Texas have been estimated since 1974 based on on-site interviews at fishing access sites (Osburn and Ferguson 1987).

Commercial landings of marine species from Texas bays and the Gulf of Mexico (Gulf) off Texas (Fig. 1) have been collected from seafood dealers since 1887 (Perret et al. 1980). These early data were collected sporadically until 1936 when annual surveys were initiated (Game, Fish and Oyster Commission 1937). Since 1936, the Texas Parks and Wildlife Department (TPWD) has monitored the landings and value of the marine fishes, oysters, crabs and shrimp through a mandatory self-reporting system known as the Monthly Marine Products Report (MMPR, Fig. 2) which is completed by seafood dealers. Since 1956, the National Marine Fisheries Service (NMFS) has collected landings data on shrimp through dealer reports and shrimp-vessel crew interviews (Prytherch 1980) while TPWD continued to collect data on fishes, crabs and oysters. An informal data exchange between agencies permitted the compilation of total self-reported landings of marine species. Beginning 1 April 1985, TPWD and NMFS instituted a formal cooperative agreement to collect and exchange commercial fisheries statistics (Fig. 3).

From 1977-1981, additional landings information, including daily landings by species, was required of commercial finfish fishermen through the use of Individual Sales Transaction (IST) forms (Fig. 4). The use of the IST form was discontinued in March 1982 by the Texas Parks and Wildlife Commission because the data were inaccurate and the reporting system was largely duplicative (Green and Thompson 1981).

This report presents the landings and ex-vessel value of self-reported transactions from seafood dealers to TPWD, and landings and ex-vessel value data collected by NMFS, from 1977 through 1986.

MATERIALS AND METHODS

Licensed seafood dealers were required to complete an MMPR each month listing the total weight and price paid for each edible species purchased from commercial fishermen (Table 1). An MMPR from each dealer, detailing the preceding month's transactions, was received at a TPWD office on or before the 10th day of each month. The Division of Statistics-Market News, NMFS, collected shrimp and menhaden landings and value data. Shrimp landings reported on MMPRs were provided to NMFS and landings of shrimp, finfish and other seafood products gathered by NMFS were provided to TPWD.

Finfish landings collected by NMFS but not purchased or handled by licensed seafood dealers are not included in this report. Commercial fishermen fishing in 1986 were subject to the fishing regulations listed in Table 2.

All MMPRs were checked for completeness by TPWD personnel. Suspected errors were corrected after contacting the submitting dealer to check the questionable information and verify any necessary corrections. All seafood products, except Eastern oysters (Crassostrea virginica), which were not reported in live weight by dealers were converted to live weight (round weight) using conversion factors listed in Appendix A. Eastern oyster landings were converted to meat weight (Appendix A, Table A.3).

Landings of Eastern oysters from leases were reported by leaseholders through MMPRs, monthly landings forms submitted to the Seabrook office of TPWD (Fig. 5) and annual summary forms (Fig. 6) submitted to the Austin Headquarters of TPWD. In the case of discrepancies between monthly and annual summaries, the highest values for landings were used. Eastern oyster landings presented in this report, except for those listed in Appendix G, represent MMPR data only and are comprised of landings from both private leases and public reefs. Eastern oyster landings in Appendix G are from private leases only.

Gulf shrimp landed at Texas ports and reported to TPWD by the Division of Statistics-Market News, NMFS, may include shrimp harvested from the waters of other states or from areas outside the territorial waters of the U.S. in addition to those from Texas waters. NMFS reports shrimp landings from statistical grid zones along the entire U.S. Gulf coast, including Texas, in their publication Gulf Coast Shrimp Data. Gulf shrimp landings in this report are pooled for all grid zones off Texas. Monthly shrimp landings for 1985 and 1986, as reported to TPWD by NMFS, are preliminary data and may be revised.

Any difference in this report compared to previous reports is due to updating of the data base and the most recent report should be considered the most accurate. Except where noted, data are reported by calendar year.

RESULTS

During the 10-year period of 1977-1986 more than 980 million pounds of seafood products valued at more than \$1.8 billion were reportedly harvested from Texas bays and the Gulf off Texas, and landed in Texas (Tables 3-6, 11,12). Shrimp, as a group, represented approximately 84% of the landings by weight and 93% of the ex-vessel value (Fig. 7.A). Blue crabs (Callinectes sapidus), primarily from bay waters, represented 9% of the landings and 2% of the ex-vessel value. Eastern oysters, harvested only from bays, represented 4% of the landings and 3% of the ex-vessel value. Finfish collectively represented 4% of the landings and 2%

of the ex-vessel value. Gulf landings constituted 68% of the total landings and 85% of the total ex-vessel value, indicating that Gulf landings were 2.5 times more valuable per pound than bay landings (Fig. 7.A). Total coastwide annual landings fluctuated around 100 million pounds during 1977-1986, ranging from 81 to 116 million, while total ex-vessel values increased an average of 5% annually from \$133 to \$246 million (Fig. 7.B).

During the 10-year period, total coastwide bay landings ranged from 24 to 37 million pounds per year and ex-vessel values ranged from \$17 to \$40 million annually (Fig. 8.A, Appendix B). The largest annual landings and ex-vessel values were reported for the Galveston Bay system which accounted for 32% of the total bay landings and 38% of the total bay ex-vessel value. The East Matagorda Bay and Sabine Lake systems each accounted for approximately 1% of the landings and less than 1% of the ex-vessel value.

The most productive offshore Gulf area with respect to seafood products landed (excluding shrimp) during the 10-year period was grid zone 18.0, offshore from the Galveston Bay system (Fig. 8.B, Appendix C). Approximately 34% of the coastwide Gulf landings was harvested from this grid zone, but it accounted for only 25% of the ex-vessel value. Grid zone 21.0, offshore from the lower Laguna Madre system, accounted for 37% of the ex-vessel value and 28% of the landings. The least productive Gulf grid zone with respect to landings was 17.0, offshore from the Sabine Lake system, accounting for 5% of the landings and <5% of the ex-vessel value.

Annual mean coastwide bay and Gulf landings of brown shrimp (*Penaeus aztecus*) and pink shrimp (*P. duorarum*) constituted 74%, by weight, of all shrimp landed and 73% of the ex-vessel value (Fig. 9.A). White shrimp (*P. setiferus*) accounted for 25% of the landings and 26% of the ex-vessel value. All other shrimp accounted for 1% of the landings and <1% of the ex-vessel value. Brown and pink shrimp landings have generally remained stable during the 10-year period while white shrimp landings have generally increased. The ex-vessel values of all shrimp species have increased since 1977 (Fig. 9.B-D).

The coastwide annual landings for all shrimp combined ranged from 68 to 97 million pounds while ex-vessel values ranged from \$126 to \$229 million (Fig. 10.A). Annual blue crab landings ranged from 7 to 10 million pounds while ex-vessel values ranged from \$2 to \$3 million (Fig. 10.B). Eastern oyster landings and ex-vessel values increased sharply after 1981 and peaked in 1983 at 8 million pounds and \$11 million, respectively. Eastern oyster landings since 1983 were consistently over 5 million pounds per year (Fig. 10.C). The landings and ex-vessel values of all other shellfish increased steadily after 1983, principally due to increased landings of stone crabs (*Menippe mercinaria*) (Tables 9,10,15,16; Fig. 10.D). Total shellfish landings reflect primarily shrimp landings and have fluctuated around 95 million pounds annually, ranging from 77 to 113 million. The annual ex-vessel values for

all shellfish increased every year, except 1980 and 1985, with the greatest relative increase occurring in 1986 (Fig. 11).

From 1977 to 1981 red drum (Sciaenops ocellatus), spotted seatrout (Cynoscion nebulosus) and black drum (Pogonias cromis) constituted 71-73% of the weight and 70-80% of the ex-vessel value of all finfish landings (Tables 3-8, 13,14). The 67th Legislature prohibited the sale of red drum and spotted seatrout effective 1 September 1981. The landings of black drum, flounder (Paralichthys sp.), sheepshead (Archosargus probatocephalus) and snapper (Lutjanidae) increased following the prohibition of red drum and spotted seatrout sales in 1981. By 1986, however, black drum and sheepshead landings and ex-vessel values were at their lowest and next to lowest levels, respectively, since 1977 while flounder and snapper were at their highest levels (Fig. 12.A-D). During 1986, black drum, flounder and snapper constituted 63% of all finfish landings and 74% of all finfish ex-vessel values. The annual landings and ex-vessel values of other finfish include red drum and spotted seatrout between 1977 and 1981 (Tables 7,8,13,14; Fig. 13.A). The annual landings of other finfish, excluding red drum and spotted seatrout, fluctuated around 460,000 pounds from 1977 until 1985 when landings increased to more than 1.2 million pounds, reflecting primarily an increase in landings of Gulf species. From 1977 to 1986 total finfish landings, excluding red drum and spotted seatrout, ranged from 1.5 to 3.3 million pounds annually with mean landings of 2.8 million pounds annually (Fig. 13.B).

Since 1977, the mean price per pound paid to commercial fishermen for most shrimp has increased by 158%, while finfish prices increased 114%, Eastern oysters increased 58% and blue crabs increased 27% (Tables 17 and 18).

Monthly summaries of landings and ex-vessel values for Texas bay systems and for grid zones of the Gulf during 1986 are presented in Appendices D and E, respectively. Weight and ex-vessel value varied among bay systems and grid zones by month and species. Nearly 58% of the weight and 56% of the ex-vessel value of brown and pink shrimp from the Gulf in 1986 was landed during June-September. Over 65% of the weight and 61% of the ex-vessel value of white shrimp from the Gulf in 1986 was landed during August-November.

Annual weight and ex-vessel value of menhaden (Brevoortia sp.) caught off Texas but landed commercially in Louisiana during 1977-1986 are presented in Appendix F. Weight and ex-vessel value have annually averaged 98,215,000 pounds and \$4,161,000, respectively.

The volume of Eastern oysters transplanted annually to private oyster leases in Texas bays, the quantities of Eastern oysters harvested annually from leases and their ex-vessel values from 1977 to 1986 are presented in Appendix G. Number of leases and leased acreage have generally increased since 1977, but weight and ex-vessel value of landings have fluctuated widely among years. The

weight (1,652,600 lb) and ex-vessel value (\$3,246,400) of 1986 landings are the highest on record.

The number of commercial licenses sold in Texas in each fiscal year (September-August) from 1956 to 1986 are presented in Appendix H. Retail fish dealer licenses sold in 1986 (6,356) increased 137% from 1985; wholesale dealer fish licenses (465) increased 85%.

DISCUSSION

Commercial fishing continues to be an important industry in Texas. Approximately 98 million pounds of seafood with an average ex-vessel value of \$175 million are reportedly landed annually. Using an approximate expansion factor of three (Grubb 1973), the total economic impact of this industry at the wholesale level in Texas approximates one-half billion dollars annually. This does not include over 98 million pounds of menhaden worth over \$4 million (ex-vessel) that are annually caught off Texas but landed in Louisiana.

Brown shrimp is the single most valuable species in the commercial fishery. Although landings of brown shrimp are not reported separately from those of pink shrimp, Christmas and Etzold (1977) have estimated that brown shrimp constitute about 95% of the landings of these two species combined. The value of the bay fishery relies primarily on white shrimp followed by brown and pink shrimp, Eastern oyster, blue crab and finfish in order of decreasing value.

Although commercial landings data have been used to determine the relative abundance of the resource, several assumptions must be made. In particular, the amount of inaccurate or incomplete reporting is typically unknown and must be considered constant when making temporal or spatial comparisons. Different reporting requirements can affect the amount of non-reporting and, thus, an estimate of relative abundance based on reported landings (Green and Thompson 1981). The problem of non-reporting by seafood dealers is seldom considered by fisheries managers when using commercial landings data as the basis for management decisions (Cushing 1970).

Deficiencies in reporting requirements and subsequent enforcement also affect the utility of commercial landings data. The 69th Legislature enacted legislation, effective 1 September 1985, which increased the maximum penalty to \$200 and possible license forfeiture for failing to file a required report (Anonymous 1985). Present Texas law, however, does not require all commercial landings to be reported. Unlicensed consumers who purchase seafood products directly from commercial fishermen without the intent to resell the products are exempt from reporting. Seafood products landed in Texas but not purchased or handled by Texas dealers (i.e., shipped and sold out of state) are not reported on the

MMPRs. Another deficiency in the present reporting system is that the MMPRs do not provide estimates of commercial fishing effort by gear type for each species landed. These deficiencies may limit the use of these commercial data for fisheries management purposes.

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Table 1. List of common and scientific names of species caught or landed in Texas.

Common name	Scientific name ^a
FINFISH	
Atlantic croaker	<u>Micropogonias undulatus</u>
Atlantic moonfish	<u>Selene setapinnis</u>
Atlantic spadefish	<u>Chaetodipterus faber</u>
Black drum	<u>Pogonias cromis</u>
Bluefish	<u>Pomatomus saltatrix</u>
Cobia	<u>Rachycentron canadum</u>
Codfish	<u>Family Gadidae</u>
Dolphin	<u>Coryphaena hippurus</u>
Flounder	
Gulf flounder	<u>Paralichthys albigutta</u>
Southern flounder	<u>Paralichthys lethostigma</u>
Florida pompano	<u>Trachinotus carolinus</u>
Gafftopsail catfish	<u>Bagre marinus</u>
Greater amberjack	<u>Seriola dumerila</u>
Grouper	
Black grouper	<u>Mycteroperca bonaci</u>
Jewfish	<u>Epinephelus itajara</u>
Nassau grouper	<u>Epinephelus striatus</u>
Scamp	<u>Mycteroperca phenax</u>
Warsaw grouper	<u>Epinephelus nigritus</u>
Yellowedge grouper	<u>Epinephelus flavolimbatus</u>
Yellowfin grouper	<u>Mycteroperca venenosa</u>
Yellowmouth grouper	<u>Mycteroperca interstitialis</u>
Gulf butterfish	<u>Peprilus burti</u>
Kingfish	
Gulf kingfish	<u>Menticirrhus littoralis</u>
Southern kingfish	<u>Menticirrhus americanus</u>
Mackerel	
King mackerel	<u>Scomberomorus cavalla</u>
Spanish mackerel	<u>Scomberomorus maculatus</u>
Menhaden	<u>Brevoortia</u> sp.
Mullet	
Striped mullet	<u>Mugil cephalus</u>
White mullet	<u>Mugil curema</u>
Red drum	<u>Sciaenops ocellatus</u>
Sand seatrout	
Sand seatrout	<u>Cynoscion arenarius</u>
Silver seatrout	<u>Cynoscion nothus</u>
Shark	
Atlantic sharpnose	<u>Rhizoprionodon terraenovae</u>
Blacktip	<u>Carcharhinus limbatus</u>
Bull	<u>Carcharhinus leucas</u>
Great hammerhead	<u>Sphyrna mokarran</u>
Shortfin mako	<u>Isurus oxyrinchus</u>
Sheepshead	<u>Archosargus probatocephalus</u>

Table 1. (Cont'd).

Common name	Scientific name ^a
Snapper	
Lane snapper	<u>Lutjanus synagris</u>
Red snapper	<u>Lutjanus campechanus</u>
Vermilion snapper	<u>Rhomboplites aurorubens</u>
Spotted seatrout	<u>Cynoscion nebulosus</u>
Swordfish	<u>Xiphias gladius</u>
Tilefish	<u>Lopholatilus chamaeleonticeps</u>
Triggerfish, gray	<u>Balistes capriscus</u>
Tuna	
Blackfin tuna	<u>Thunnus atlanticus</u>
Bluefin tuna	<u>Thunnus thynnus</u>
Yellowfin tuna	<u>Thunnus albacares</u>
Wahoo	<u>Acanthocybium solanderi</u>
SHELLFISH	
Atlantic bay scallop	<u>Argopecten irradians</u>
Crab	
Blue crab	<u>Callinectes sapidus</u>
Stone Crab	<u>Menippe mercinaria</u>
Eastern oyster	<u>Crassostrea virginica</u>
Shrimp	
Brown shrimp	<u>Penaeus aztecus</u>
White shrimp	<u>Penaeus setiferus</u>
Pink shrimp	<u>Penaeus duorarum</u>
Other shrimp	
Rock shrimp	<u>Sicyonia brevirostris</u>
Royal red shrimp	<u>Hymenopenaeus robustus</u>
Seabob	<u>Xiphopenaeus kroyeri</u>
Squid	
Brief squid	<u>Lolliguncula brevis</u>
Long-finned squid	<u>Loligo pealei</u>

^a Scientific names provided by Robins et al. (1980), Christmas and Etzold (1977), Hofstetter (1977) Leary (1967) and Rathjen (1973).

Table 2. Summary of commercial fishing regulations in Texas marine waters during 1986.

Organism	Method	Location	Product	Open Season	Time ^a	Exceptions
Shrimp	Trawl	Bait and major bays	Bait ^b	All year	24 h	Night ^c trawling prohibited from 15 Aug until 15 Dec, inclusively, except in Laguna Madre.
	Trawl	Major bays	All ^b	15 May-15 Jul 15 Aug-15 Dec	Day ^d	None
	Trawl	Gulf (0-7 fathoms)	All ^b	All year	Day ^d	Trawling prohibited from 4-7 fathoms 1 Jun to 15 Jul, inclusively. Trawling for white shrimp allowed during day in 0-4 fathoms.
	Trawl	Gulf (>7 fathoms)	All ^b	All year	24 h	Trawling prohibited beyond 7 fathoms from 1 Jun to 15 Jul, inclusively.
Crabs	Trap, trawl, net, hook and line	Bays ^e , Gulf ^f	All	All year	24 h	None
Oysters	Dredge	Bays ^e	Market	1 Nov-30 Apr	Day ^d	Seasons may be modified by Texas Dept. of Health and/or Texas Parks and Wildlife.
Finfish	Traps (perch)	Bays ^e Gulf ^f	Bait	All year	24 h	None
	(snapper)	Gulf ^f	Snapper	All year	24 h	Prohibited within 1 mile of any shoreline.
	Trotline	Bays ^e , Gulf ^f	All ^b	By county	24 h	Legal in all counties with restrictions ^g and, Harris ^h , Chambers.
Nets						
(Strike)	Bays ^e	All ^b	By county	24 h	Legal in following counties with restrictions ^g :	
(gill)	Bays ^e	All ^b	By county	24 h	Chambers, Galveston, Harris, Matagorda, Nueces.	
(trammel)	Bayse	All ^b	By county	24 h		
(seine)	Bayse	All ^b	By county	24 h		
(purse)	Gulf ^f	Menhaden	i	24 h	Legal in gulf waters of all coastal counties, but prohibited within 1/2 mile of any shoreline or within 1 mile of any pass.	
Trawls	Gulf ^f	All ^b	By county	24 h	Trawling legal in gulf waters of Aransas, Brazoria, Jefferson, Matagorda and Willacy counties.	

Restrictions and Definitions:

^aGear fishing time.^bReddrum and spotted seatrout excluded.^cNight is defined as the time between 30 min. after sunset and 30 min. before sunrise.^dDay is defined as the time between 30 min. before sunrise and 30 min. after sunset.^ePermitted in designated portions of bays.^fPermitted in gulf waters with restrictions.^gAll gear must be removed from the water between 1 pm Friday and 1 pm Sunday.^hNetting prohibited from Saturday of Memorial Day weekend until sunset on Labor Day.ⁱNetting prohibited from 15 May through 15 Aug.^jNetting prohibited in May, Jun, Jul and Aug.^kNetting permitted from third Monday of Apr until Friday after second Tuesday of Oct.

Table 3. Texas commercial finfish and shellfish landings ($1b \times 1000$) during 1977-1986. Data based on MPR.

Year	Finfish				Shrimp				Shellfish				Grand Total		
	Black drum	Flounder	Sheepshead	Snapper	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total			
1977	1,453.5	310.9	293.9	440.0	2,795.8	5,294.1	71,897.5	19,420.2	260.3	91,578.0	8,248.6	2,600.5	13.8	102,440.9	107,735.0
1978	1,785.5	237.1	327.9	388.3	2,447.7	5,186.5	62,329.7	21,464.7	332.3	84,126.7	7,469.6	1,907.0	15.5	93,518.8	98,705.3
1979	1,531.4	232.5	406.1	214.7	2,163.8	4,548.3	50,459.3	16,474.2	719.2	67,652.7	8,311.5	888.8	0.9	76,853.9	81,402.2
1980	1,058.4	194.9	473.5	231.6	2,392.4	4,351.1	58,332.0	14,235.3	1,330.2	73,897.5	8,953.0	1,738.5	0	84,589.0	88,940.1
1981	663.8	130.5	202.8	165.9	1,513.5	2,676.5	78,494.0	16,160.5	1,075.7	95,730.2	6,952.0	1,309.4	0	103,991.6	106,668.1
1982	1,249.0	535.9	322.4	369.6	524.0	3,000.9	51,386.4	18,288.1	1,211.1	70,885.6	8,009.9	3,633.1	13.4	82,542.0	85,542.9
1983	1,492.8	474.3	275.9	261.9	425.6	2,930.5	50,707.3	20,369.5	916.9	71,993.7	8,829.1	7,940.8	7.8	88,771.4	91,701.9
1984	900.2	380.1	179.2	452.2	367.1	2,278.8	62,051.7	27,562.1	232.5	90,236.3	7,228.6	5,167.7	46.0	102,678.6	104,957.4
1985	643.9	443.5	183.2	663.5	1,258.8	3,192.9	57,432.1	24,202.3	606.1	82,240.5	9,722.0	5,133.9	171.7	97,267.7	100,460.6
1986	588.0	560.3	131.2	916.1	1,102.6	3,298.2	67,782.6	27,148.2	1,743.2	97,274.0	9,481.6	5,607.4	199.4	112,562.4	115,850.6

Table 4. Texas commercial finfish and shellfish ex-vessel value ($\$ \times 1000$) during 1977-1986. Data based on MPR.

Year	Finfish				Shrimp				Shellfish				Grand Total		
	Black drum	Flounder	Sheepshead	Snapper	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total			
1977	399.8	170.8	28.8	420.9	1,324.5	2,339.2	100,815.9	24,627.2	235.2	125,678.3	1,946.7	2,991.7	4.2	130,620.9	132,960.1
1978	607.5	173.2	39.2	403.5	1,447.7	2,671.1	101,798.7	38,837.6	344.6	140,980.9	2,003.8	2,205.6	4.4	145,194.7	147,865.8
1979	602.3	190.1	55.8	261.6	1,518.6	2,648.4	117,273.3	34,687.5	381.0	152,341.8	2,146.1	1,048.7	0.2	155,536.8	158,185.2
1980	539.8	153.7	66.5	351.3	2,044.5	3,155.8	113,972.9	25,637.8	433.2	140,043.9	2,455.8	2,692.3	0	145,192.0	148,347.8
1981	378.1	138.3	42.0	267.8	1,487.4	2,313.6	133,226.9	31,774.9	317.9	165,319.7	1,928.5	2,150.7	0	169,398.9	171,712.5
1982	782.5	521.4	79.7	669.2	136.8	2,189.6	131,658.5	43,724.9	504.4	175,887.8	2,375.1	5,313.7	5.0	183,581.6	185,771.2
1983	971.0	445.6	66.0	383.5	118.5	1,984.6	125,430.4	45,682.8	330.6	171,443.8	3,250.3	11,336.7	3.2	186,034.0	188,018.6
1984	449.3	351.0	36.8	818.3	119.5	1,774.9	125,724.7	53,607.1	198.5	179,530.3	2,252.5	8,308.7	22.9	190,114.4	191,889.4
1985	427.3	445.3	41.1	1,242.4	555.9	2,712.0	113,421.2	47,796.6	164.9	161,382.7	3,309.7	8,754.9	127.7	173,574.9	176,287.0
1986	411.2	540.3	35.6	1,708.4	901.4	3,596.8	167,301.9	60,882.5	925.6	229,110.0	3,170.3	10,412.9	106.8	242,800.0	246,396.8

Table 5. Weight ($1\text{lb} \times 1000$) of each species landed commercially from Texas bay systems during 1977-1986. Data based on MAFR.

Year	Finfish										Shellfish										Grand Total																																																		
	Black drum					Atlantic croaker					Gafftopsail catfish					Sheepshead					Mullet					Unclassified food					Scrub					Total					Brown and pink					Shrimp					Blue crab					Eastern oyster					Other					Total					
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Mullet	Other	Food	Scrub	Total	Brown	Pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	Blue crab	Eastern oyster	Other	Total	Blue crab	Eastern oyster	Other	Total	Blue crab	Eastern oyster	Other	Total	Blue crab	Eastern oyster	Other	Total	Blue crab	Eastern oyster	Other	Total	Blue crab	Eastern oyster	Other	Total																												
1977	1,390.7	210.4	30.0	60.8	280.0	7.8	2,148.3	44.1	140.5	4,292.7	4,711.1	9,391.4	1.6	14,104.1	8,237.4	2,600.5	5.3	24,947.3	29,240.0																																																				
1978	1,752.3	192.7	19.8	50.4	317.0	8.1	1,983.9	80.0	51.6	4,455.8	5,089.4	8,293.2	0	13,382.6	7,467.8	1,907.0	4.3	22,761.7	27,217.5																																																				
1979	1,504.7	206.8	16.4	39.0	383.5	82.5	1,595.9	81.9	44.8	3,955.5	7,194.3	8,027.7	0	15,222.0	8,311.0	888.8	0.3	24,422.1	28,377.6																																																				
1980	1,047.2	149.8	13.6	45.3	466.4	87.3	2,044.9	31.0	44.8	3,930.3	8,031.4	6,813.2	4.7	14,849.3	8,949.3	1,738.5	0	25,537.1	29,467.4																																																				
1981	649.5	101.8	2.2	6.9	193.7	85.2	1,240.8	19.3	9.7	2,309.1	7,156.3	6,096.0	0	13,252.3	6,945.6	1,389.4	0	21,587.3	23,896.4																																																				
1982	1,224.5	439.4	60.4	15.7	303.6	137.7	51.5	23.2	45.1	2,301.1	6,837.4	7,435.9	0.5	14,273.8	8,007.2	3,633.1	10.1	25,924.2	28,225.3																																																				
1983	1,480.8	399.4	19.5	37.5	272.2	100.1	15.0	42.1	71.5	2,438.1	10,050.2	8,033.3	0	18,083.5	8,794.0	7,940.7	2.6	34,820.8	37,258.9																																																				
1984	869.3	301.1	1.8	22.1	168.1	74.0	8.5	19.0	54.4	1,518.3	11,719.0	10,509.6	0.2	22,228.8	7,201.2	5,167.7	25.0	34,622.7	36,141.1																																																				
1985	632.0	369.6	35.8	27.2	157.0	253.5	13.3	48.3	250.9	1,787.6	9,178.0	7,101.5	3.0	16,282.5	9,061.5	5,133.9	153.5	31,261.0	33,048.4																																																				
1986	572.4	493.3	36.6	17.5	112.7	112.2	22.9	32.5	103.2	1,503.2	9,556.0	10,894.0	1.4	20,451.4	9,398.8	5,607.4	184.6	35,642.2	37,145.4																																																				

Table 6. Ex-vessel ($\$/1000$) of each species landed commercially from Texas bay systems during 1977-1986. Data based on MPR.

Table 7. Weight (lb x 1000) of "other" finfish species landed commercially from Texas bay systems during 1977-1986. Data based on MPR.

Species	Year					
	1977	1978	1979	1980	1981	1982
Atlantic moonfish	0	0	0	0	0	0
Atlantic spadefish	0	0	0	0	0	0
Florida pompano	0.4	0.5	2.1	0.4	0.2	5.1
Gulf butterfish	0	0	0	0	0	0
Kingfish, unclassified	6.6	4.8	7.9	6.2	2.7	47.9
Mackerel	0	0	0	0	0	0
Red drum	899.8	853.5	676.9	1,106.4	604.3	0
Sand seatrout	6.5	6.4	9.8	3.5	16.2	3.6
Shark, unclassified	0	0	0	0	0	0
Spotted seatrout	1,235.0	1,118.6	899.3	928.3	617.2	0
Total	2,148.3	1,983.8	1,596.0	2,044.8	1,240.6	51.7
						15.0
						8.5
						13.3
						11.1

Table 8. Ex-vessel value (\$ x 1000) of "other" finfish species landed commercially from Texas bay systems during 1977-1986. Data based on MMR.

Species	Year					
	1977	1978	1979	1980	1981	1982
Atlantic moonfish	0	0	0	0	0	0
Atlantic spadefish	0	0	0	0	0	0
Florida pompano	0.2	0.5	2.6	0.6	0.3	0.4
Gulf butterfish	0	0	0	0	0	0
Kingfish, unclassified	1.2	0.8	1.8	1.1	0.7	10.6
Mackerel	0	0	0	0	0	0
Red drum	483.9	588.3	564.2	1,016.5	683.8	0
Sand seatrout	3.6	3.9	6.6	1.4	2.5	1.2
Shark, unclassified	0	0	0	0	0	0
Spotted seatrout	660.2	739.8	770.4	911.1	699.9	0
Total	1,149.1	1,333.3	1,345.6	1,930.7	1,387.6	12.2
					5.1	4.0
						6.3
						6.1

Table 9. Weight (lb x 1000) of "other" shellfish species landed commercially from Texas bay systems during 1977-1986. Data based on MPR.

Species	Year					
	1977	1978	1979	1980	1981	1982
Atlantic bay scallop	0	0	0	0	0	0
Squid	5.3	4.3	0.3	0	0	10.1
Stone crab	0	0	0	0	0	0
Total	5.3	4.3	0.3	0	10.1	2.6
						10.0
						17.6
						25.7
						153.7
						135.8
						184.6
						153.5
						100.0

Table 10. Ex-vessel (\$ x 1000) of "other" shellfish species landed commercially from Texas bay systems during 1977-1986. Data based on MPR.

Species	Year					
	1977	1978	1979	1980	1981	1982
Atlantic bay scallop	0	0	0	0	0	0
Squid	1.8	1.2	0.1	0	0	4.0
Stone crab	0	0	0	0	0	0
Total	1.8	1.2	0.1	0	0	4.0
						1.3
						9.6
						110.2
						77.7
						117.8
						100.0

Table 11. Weight (lb x 1000) of each species landed commercially from the Gulf of Mexico during 1977-1986. Data based on MMRP.

Year	Black drum	Flounder	Finfish										Shellfish									
			Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Grouper	Snapper	Other food	Scrap	Total	Brown	pink	White	Other	Total	Blue crab	Other	Total	Grand Total	
1977	62.8	100.5	13.4	33.7	26.8	0.9	20.0	22.0	440.0	166.3	72.0	43.0	1,001.4	67,186.4	10,028.8	258.7	77,473.9	11.2	8.5	77,493.6	78,495.0	
1978	33.2	44.5	27.1	10.9	19.8	28.3	13.7	39.9	428.5	61.7	27.4	36.1	730.7	57,240.3	13,171.5	332.3	70,744.1	1.8	11.2	70,757.1	71,487.8	
1979	26.7	25.7	0.4	22.6	8.8	28.8	7.7	14.3	214.7	149.5	31.0	62.6	592.8	43,265.0	8,446.5	719.2	52,430.7	0.5	0.9	52,432.1	53,024.9	
1980	11.2	45.1	0.4	7.1	13.3	4.4	2.2	23.1	231.6	61.5	12.1	8.8	420.8	50,300.6	7,422.2	1,325.6	59,048.4	3.6	0	59,052.0	59,472.8	
1981	14.3	28.7	2.6	9.2	13.5	10.4	13.7	29.8	165.9	40.2	34.4	4.7	367.4	71,337.7	10,064.5	1,075.7	82,478.0	6.4	0	82,484.3	82,851.7	
1982	24.5	96.5	1.4	18.8	25.2	3.2	24.1	64.8	369.6	4.0	67.1	0.7	699.9	44,549.0	10,852.3	1,210.6	56,611.9	2.7	3.4	56,618.0	57,317.9	
1983	12.0	75.0	5.8	3.7	11.5	20.4	17.2	34.8	261.9	1.1	47.5	1.6	492.5	40,657.1	12,326.2	916.9	53,910.2	35.1	5.2	53,950.4	54,442.9	
1984	30.9	79.0	4.8	11.2	14.9	9.8	12.7	33.1	452.2	80.2	29.2	2.6	760.5	50,332.7	17,442.5	232.4	68,007.6	27.3	17.0	68,051.9	68,812.4	
1985	11.9	73.9	18.3	26.1	20.5	42.7	6.0	290.1	663.5	217.7	67.0	7.5	1,405.3	48,254.1	17,100.7	603.2	65,958.0	31.0	15.1	66,004.1	67,409.4	
1986	15.6	67.1	12.3	18.6	14.9	3.8	11.3	224.3	916.1	504.6	3.8	2.6	1,795.0	58,226.6	16,584.2	1,741.7	76,552.5	82.9	14.7	76,650.1	78,445.1	

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Table 12. Ex-vessel (\$ x 1000) of each species landed commercially from the Gulf of Mexico during 1977-1986. Data based on MMRP.

Year	Black drum	Flounder	Finfish										Shellfish									
			Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Grouper	Snapper	Other food	Scrap	Total	Brown	pink	White	Other	Total	Blue crab	Other	Total	Grand Total	
1977	12.0	49.2	4.3	5.5	4.2	0.2	4.7	5.2	420.9	91.6	12.8	4.9	615.2	100,815.9	24,627.2	235.2	125,678.3	2.2	4.2	125,684.7	126,299.7	
1978	6.8	24.0	12.7	1.6	2.7	2.5	4.4	9.8	403.5	35.9	5.8	3.7	513.4	101,798.7	38,837.6	344.6	140,980.9	0.3	4.4	140,985.6	141,439.2	
1979	8.8	16.5	0.1	3.8	1.2	2.4	2.8	6.7	261.6	125.8	9.4	7.5	446.5	117,237.3	34,687.5	381.0	152,305.8	0.2	0.2	152,306.2	152,742.7	
1980	3.0	31.2	0.1	1.4	2.3	0.7	1.1	9.7	351.3	~ 60.0	5.2	0.7	466.7	113,972.9	25,637.8	433.2	140,043.9	0.8	0	140,044.7	140,511.4	
1981	4.6	20.6	2.1	1.7	2.8	1.3	7.3	14.2	267.8	50.4	7.2	0.3	380.3	129,069.4	24,541.3	317.9	153,928.6	1.7	0	153,930.3	154,310.6	
1982	9.0	82.4	0.5	4.9	5.1	0.5	13.1	42.7	669.2	3.3	17.6	0.1	848.4	126,037.3	30,800.9	504.1	157,342.3	0.8	1.0	157,344.1	158,192.5	
1983	5.6	51.2	1.9	0.9	2.8	3.3	10.2	31.9	389.5	0.3	12.3	0.2	504.1	113,408.4	33,074.0	330.7	146,813.1	10.6	2.0	146,825.7	147,329.8	
1984	9.3	55.6	2.0	2.5	3.4	1.4	8.7	27.5	818.3	33.0	11.5	0.2	973.4	116,760.5	40,295.5	198.2	157,254.2	7.0	6.0	157,870.4	158,240.6	
1985	6.2	62.8	7.8	4.8	6.5	5.7	4.0	212.7	215.3	18.6	1.4	1.788.3	107,535.6	38,360.8	164.1	146,060.5	8.5	6.1	146,078.8	147,863.4		
1986	8.9	54.7	5.5	5.6	5.2	0.9	7.7	216.5	1,708.4	595.3	2.0	0.6	2,611.2	158,211.5	44,569.2	924.7	203,805.4	32.4	6.7	203,844.5	206,455.7	

Table 13. Weight (lb x 1000) of "other" finfish species landed commercially from the Gulf of Mexico during 1977-1986. Data based on MPR.

Species	Year					
	1977	1978	1979	1980	1981	1982
Atlantic croaker	2.8	10.2	3.7	2.7	2.4	0.4
Atlantic moonfish	0	0	0	0	0	0
Atlantic spadefish	0	0	0	0	0	0
Bluefish	0	0	0	0	0	0
Codfish	0	0	0	0	0	0
Dolphin	0	0	0	0	0	0
Florida pompano	0.5	0.5	1.5	0.8	0.2	3.6
Greater amberjack	0	0	0	0	0	0
Gulf butterfish	0	0	0	0	0	0
Mackerel, king	0	0	0.2	0	0	0
Mackerel, Spanish	0	0	0	0	0	0
Red drum	51.0	7.6	13.1	8.1	9.0	0
Sand seatrout	0	0	0	0	0	0
Shark, blacktip	0	0	0	0	0	0
Shark, shortfin mako	0	0	0	0	0	0
Shark, unclassified	0	0	0	0	0	0
Spotted seatrout	111.8	43.4	131.0	49.7	28.6	0
Swordfish	0	0	0	0	0	0
Tilefish	0	0	0	0	0	0
Triggerfish, gray	0	0	0	0	0	0
Tuna, blackfin	0	0	0	0	0	0
Tuna, bluefin	0	0	0	0	0	0
Tuna, unclassified	0	0	0	0	0	0
Tuna, yellowfin	0	0	0	0	0	0
Wahoo	0	0	0	0	0	0
Total	166.1	61.7	149.5	61.3	40.2	4.0
					1.1	79.7
						217.5
						518.1

Table 14. Ex-vessel value ($\$ \times 1000$) of "other" finfish species landed commercially from the Gulf of Mexico during 1977-1986. Data based on NMFS.

Table 15. Weight (lb x 1000) of "other" shellfish species landed commercially from the Gulf of Mexico during 1977-1986. Data based on MPR.

Species	Year						1985	1986
	1977	1978	1979	1980	1981	1982		
Squid	8.5	11.2	0.9	0	0	3.4	5.2	17.0
Stone crab	0	0	0	0	0	0	3.9	3.2
Total	8.5	11.2	0.9	0	0	3.4	5.2	14.7

Table 16. Ex-vessel (\$ x 1000) of "other" shellfish species landed commercially from the Gulf of Mexico during 1977-1986. Data based on MPR.

Species	Year						1985	1986
	1977	1978	1979	1980	1981	1982		
Squid	4.2	4.4	0.2	0	0	1.0	2.0	6.0
Stone crab	0	0	0	0	0	0	3.6	3.8
Total	4.2	4.4	0.2	0	0	1.0	2.0	6.7

Table 17. Price (\$/lb) paid commercial fishermen for finfish during 1977-1986. Data based on NMFR.

Year	Black drum		Flounder		Sheepshead		Snapper		Other	
	Range	Mean	Range	Mean	Range	Mean	Range	Mean	Range	Mean
1977	0.25-0.65	0.28	0.22-1.10	0.55	0.05-0.35	0.10	0.45-1.30	0.94	0.10-1.15	0.47
1978	0.30-0.65	0.34	0.40-1.30	0.73	0.05-0.35	0.12	0.85-1.65	1.04	0.05-1.35	0.59
1979	0.25-0.50	0.39	0.35-1.40	0.82	0.05-0.30	0.14	0.60-1.65	1.22	0.03-1.10	0.70
1980	0.35-0.70	0.51	0.25-1.25	0.79	0.03-0.25	0.14	0.65-1.95	1.52	0.05-1.25	0.85
1981	0.45-0.80	0.57	0.60-1.25	1.06	0.03-0.40	0.21	0.85-2.45	1.61	0.05-1.45	0.98
1982	0.45-0.85	0.63	0.50-1.35	0.97	0.10-0.50	0.25	0.60-2.15	1.01	0.05-0.85	0.26
1983	0.30-0.85	0.65	0.35-1.40	0.94	0.05-0.45	0.24	0.60-2.15	1.46	0.05-0.70	0.28
1984	0.25-0.80	0.49	0.50-1.00	0.92	0.05-0.30	0.20	1.45-2.95	1.80	0.05-1.50	0.32
1985	0.25-0.95	0.66	0.45-1.35	1.00	0.10-0.70	0.22	1.25-2.25	1.86	0.05-5.00	0.47
1986	0.10-1.20	0.70	0.16-2.05	0.96	0.08-0.64	0.27	0.30-2.78	1.86	0.05-6.00	0.82

Table 18. Price (\$/lb) paid commercial fishermen for shellfish during 1977-1986. Data based on NMFR and NMFS.

Year	Shrimp				Blue crab				Eastern oyster	
	Brown and pink	Range	Mean	White	Range	Mean	Other	Range	Mean	Range
1977	0.85-3.10	1.49	0.45-2.95	1.44	0.85-2.80	1.11	0.16-0.35	0.26	0.85-1.25	1.18
1978	0.65-3.25	1.63	0.90-2.95	1.81	0.20-0.26	1.04	0.17-0.35	0.27	1.01-1.25	1.16
1979	0.45-3.25	2.32	0.45-3.15	2.11	0.25-0.95	0.53	0.14-0.55	0.26	0.91-1.63	1.18
1980	0.40-3.15	1.95	0.45-2.95	1.80	0.39-0.90	0.33	0.16-0.50	0.27	1.01-1.64	1.55
1981	0.40-3.20	1.70	0.45-3.00	1.97	0.35-0.85	0.30	0.21-0.55	0.28	1.04-1.70	1.55
1982	0.50-4.20	2.56	0.50-5.15	2.39	0.40-0.80	0.42	0.23-0.60	0.30	1.05-1.65	1.46
1983	0.50-4.00	2.47	0.50-4.25	2.24	0.25-0.90	0.36	0.23-0.60	0.37	1.05-1.71	1.43
1984	0.70-4.13	2.02	0.63-4.82	1.91	0.24-1.73	0.85	0.22-0.60	0.31	1.29-2.06	1.60
1985	0.40-4.40	1.97	0.50-4.91	2.24	0.20-0.51	0.27	0.22-0.75	0.34	1.26-1.89	1.70
1986	0.42-3.30	2.47	0.40-4.22	2.19	0.25-0.90	0.53	0.15-0.72	0.33	0.86-2.83	1.86

Figure 1. Texas bay systems and Gulf of Mexico grid zones.

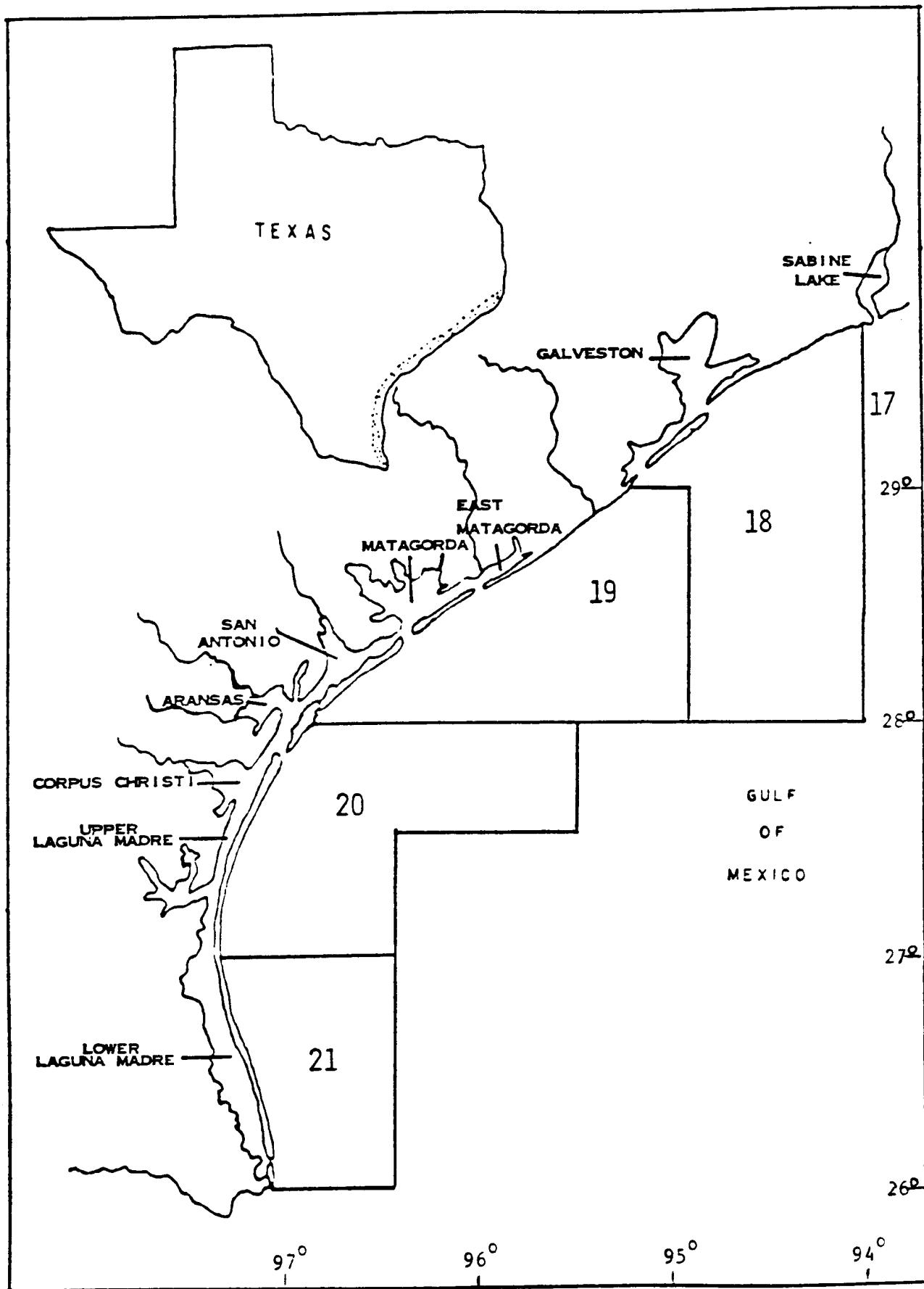


Figure 2. Monthly Marine Products Report (MMPR) form.

MARINE PRODUCTS REPORT (Dealer's Report)

No. _____ For the Month of: _____ 19_____

Dealer: _____

Address: _____

NOTE: If catch is from the Gulf, so indicate under "Name of Bay" columns.

Species Code	Species Name	Name of Bay	Water Code	No. of Pounds	No. of Barrels	Price Per Barrel
7881	Oysters					

NOTE Do not complete section under "Water Code."

GEAR USED: _____

TEXAS PARKS AND WILDLIFE DEPARTMENT
P. O. Box 1717
Rockport, Texas 78385

This report is due in one of the above offices of the Texas Parks and Wildlife Department before the 10th day of each month in accordance with H.B. 175, Reg. Ses. 44th Leg., and S.B. 624, Reg. Ses. 65th Leg.

Figure 3. Letters establishing formal cooperative commercial landings data collection agreement between the Texas Parks and Wildlife Department and the National Marine Fisheries Service.

November 20, 1984

Dr. Albert C. Jones
75 Virginia Beach Drive
Southeast Fisheries Center
National Marine Fisheries Center
Miami, Florida 33149

Dear Al:

Enclosed is a letter that your staff can provide to seafood dealers in Texas who handle mainly shrimp but also purchase fish, crabs, or oysters infrequently. This letter should be signed by the dealer who wishes to provide seafood landings data to NMFS for submission to the Parks and Wildlife Department (TPWD) pursuant to our informal agreement that has been in place since 1960 whereby NMFS collects commercial shrimp landings and TPWD collects all other seafood landings. Once signed, a copy of each letter should be sent to Dr. Gary Matlock at 4200 Smith School Road, Austin, Texas 78744.

Thank you for your cooperation in minimizing duplication of our respective programs. Please contact me if you have any questions.

Sincerely,

Robert J. Kemp
Director of Fisheries

RJK:GM:dr

Enclosure

cc: Kim Newlin
Orman Farley

Figure 4. Individual Sales Transaction (IST) form.

TEXAS PARKS AND WILDLIFE DEPARTMENT
4200 SMITH SCHOOL ROAD AUSTIN, TEXAS 78744
COMMERCIAL FISH LANDINGS

INDIVIDUAL SALES TRANSACTION

Three rectangular boxes arranged horizontally, each containing a vertical dashed line down the center. The first box is labeled "MONTH", the second "DAY", and the third "YEAR".

DATE OF SALE

1

FORM NO

BUSINESS NAME

FISHERMAN'S NAME

--	--	--	--	--

**COMMERCIAL
LICENSE NO.**

— — — — —

**RED DRUM
LICENSE NO.**

BAY OR GULF WHERE FISH WERE TAKEN:

CIRCLE ONLY ONE AREA CODE : SEE MAP ON FOLDER

CIRCLE ONLY ONE AREA CODE - SEE MAP ON FOLLOWING PAGE
SARINE GALVESTON MATAGORDA SAN ANTONIO ARANSAS CORPUS CHRISTI LAGUNA MADRE LAGUNA MADRE GULF OF MEXICO

SABINE GALVESTON MATAGORDA SAN ANTONIO ARANSAS CORPUS CHRISTI LAGUNA MADRE LAGUNA MADRE NUECE

GEAR USED: 1 TROTLINE 5 SEINE 9 GIG 13 CRAB TRAWL
CIRCLE ONLY 2 TRAMMEL NET 6 SNAGLINE 10 SHRIMP TRAWL 14 OYSTER DREDGE
 ONE 3 GILL NET 7 LONGLINE 11 FISH TRAWL 15 OYSTER TONGS
 NUMBER 4 ROD AND REEL 8 PURSE SEINE 12 CRAB TRAP 16 OTHER

SPECIES	CODE	POUNDS	PRICE PER LB.		FOR DEALER USE
			\$	CENTS	
RED DRUM	01				
BLACK DRUM	02				
SPOTTED SEATROUT	03				
SAND SEATROUT	04				
FLounder	05				
SHEEPSHEAD	06				
ATLANTIC CROAKER	07				
GAFFTOP CATFISH	08				
WHITING	09				
POMPANO	10				
MULLET	11				
RED SNAPPER	12				
GROUPER (WARSAW)	13				
UNCLASSIFIED FOOD	14				
UNCLASSIFIED SCRAP	15				
CRABS (LIVE WEIGHT)	80				
OTHERS (LIST)					

OYSTER SALES	CODE	QUANTITY (NO. OF UNITS)	PRICE PER UNIT		YIELD IN GALS./UNIT	FOR DEALER USE
			\$	CENTS		
OYSTERS IN SACKS	81					
OYSTERS IN BUSHELS	82					
OYSTERS IN GALLONS	83					

Figure 5. Monthly oyster landings form submitted to the Seabrook office of the Texas Parks and Wildlife Department.

OYSTER HARVEST MONTHLY REPORTS
PRIVATE OYSTER LEASE
REGION IV

HARVEST REPORT FOR MONTH OF _____

PERMIT NO. _____

OYSTER LEASE NO. _____

NAME OF LEASE HOLDER _____

ADDRESS _____

BOATS USED FOR THIS LEASE THIS MONTH _____

NO. BARRELS HARVESTED _____
OR

NO. BUSHELS HARVESTED _____

NAME OF DEALER(S) BUYING OYSTERS _____

ADDRESS _____

SIGNATURE _____

This report must be submitted to the Regional Director for Coastal Fisheries, Region IV, Parks and Wildlife Department, 1018 Toddville Road, P.O. Box 8, Seabrook, Texas 77586, by the 5th of the following month after harvest of oysters from private lease.

Figure 6. Annual Oyster Location Lease Report form.

OYSTER LOCATION LEASE REPORT

Leaseholder: _____
Annual Rental: _____
Lease Number: _____
Date Filed: _____
Acreage: _____

Section 76.017 - 76.018 Parks and Wildlife Code:

The owner or locator of private oyster beds under the foregoing provisions shall not be required to pay any rentals on such locations for a period of five years, or till such time as he shall begin to market or sell oysters from such location or bed. When such locator shall begin to sell or market oysters from such location, he shall pay the State three dollars per acre per annum and ten cents a barrel on oyster sales.

Failure to pay such rental by the first day of March of each year shall annul and be a forfeiture of his lease. And if oysters are not marketed or sold from such location within five years from the date of location, such location shall become void.

IMPORTANT: PLEASE NOTE CHANGE IN LAW RESULTING IN INCREASE.

Enclosed is my rental payment for Lease # _____:

Lease (_____ acres @ \$3.00 per acre)	\$ _____
Oyster Sales (_____ barrels @ 10¢ per barrel)	\$ _____

Total Remittance	\$ _____
------------------	----------

Signature _____ Date _____

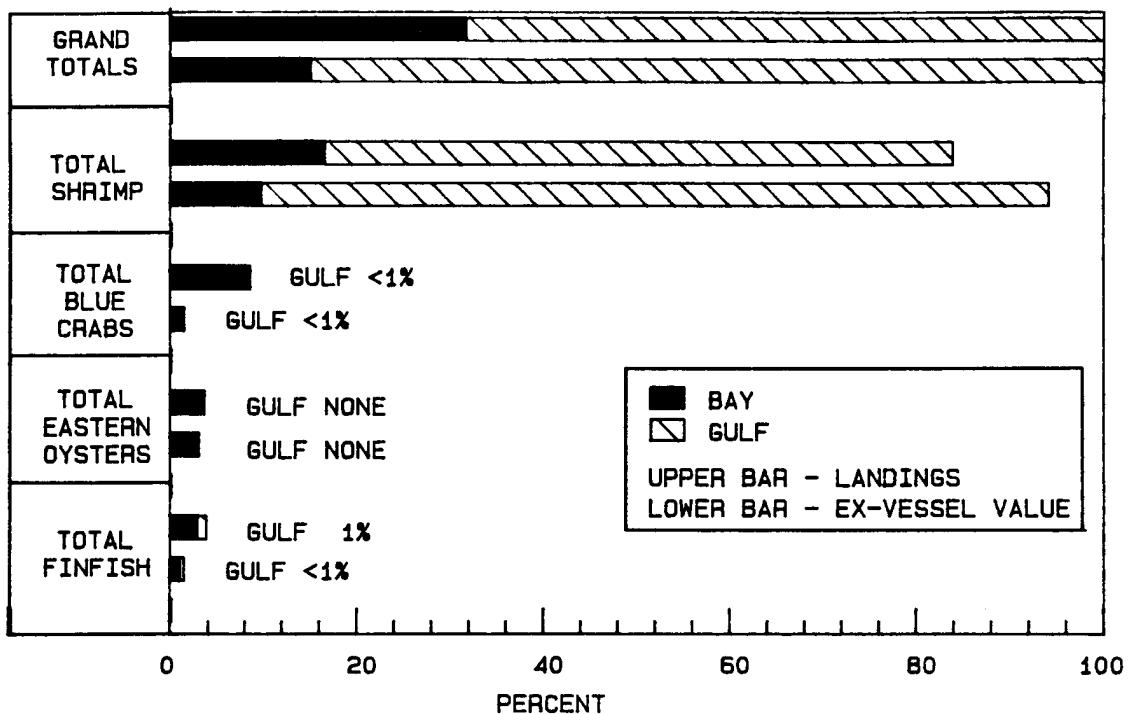
FAILURE TO PAY RENTAL ON THIS LEASE BY MARCH 1, 1987 SHALL ANNUL AND BE A FORFEITURE OF THE LEASE ACCORDING TO LAW.

Please Return Report To:
 Texas Parks and Wildlife Department
 Revenue Branch
 4200 Smith School Road
 Austin, Texas 78744

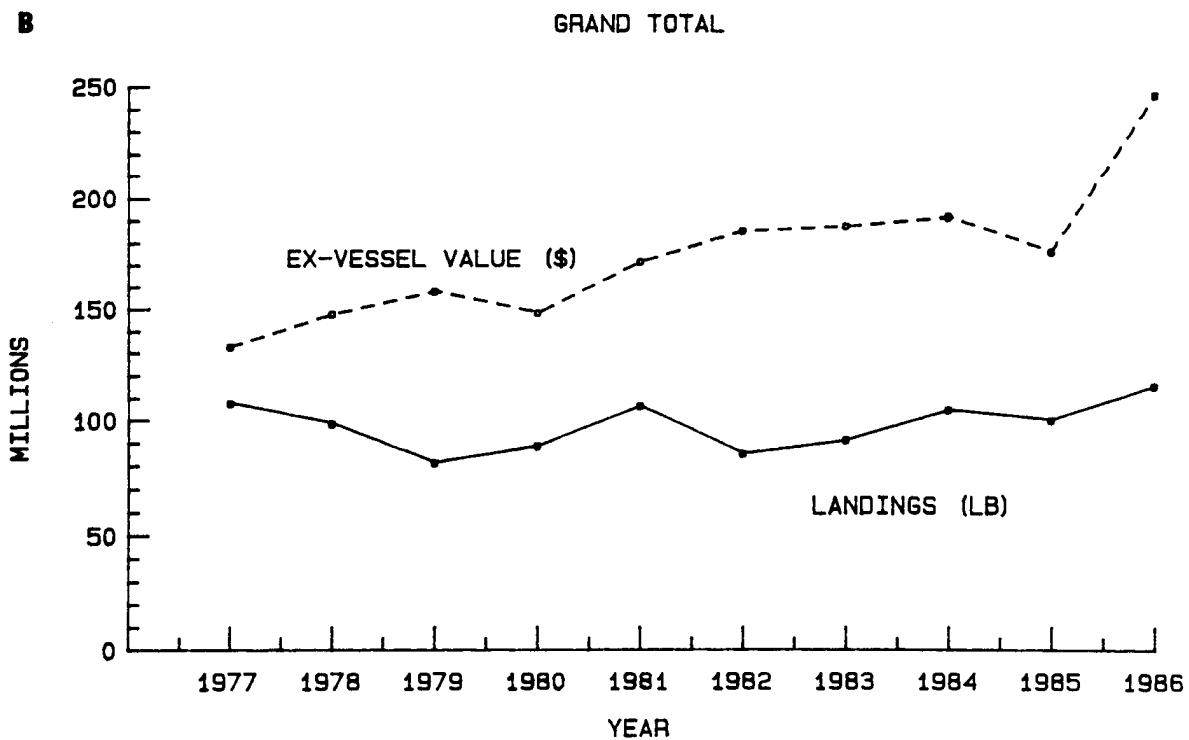
- Figure 7.**
- A. A comparison of bay and Gulf landings and ex-vessel values for the four major seafood groups expressed as percents of their respective coastwide totals for 1977 through 1986.
 - B. Texas commercial landings (lb) and ex-vessel values (\$) for all seafood (grand total) by year for 1977 through 1986.

Data for Figure 7 derived from MMPR and NMFS surveys.

A



B



- Figure 8.
- A. A comparison of commercial bay landings and ex-vessel values by bay system expressed as percents of the total coastwide bay landings for 1977 through 1986.
 - B. A comparison of commercial Gulf landings (excluding shrimp) and ex-vessel values by offshore grid zones expressed as percents of the total coastwide Gulf landings for 1977 through 1986. Bay systems adjacent to offshore grid zones are: 17.0-Sabine Lake; 18.0-Galveston; 19.0-Matagorda, San Antonio, Aransas; 20.0-Corpus Christi, Upper Laguna Madre; 21.0-Lower Laguna Madre.

Data for Figure 8 derived from MMPR.

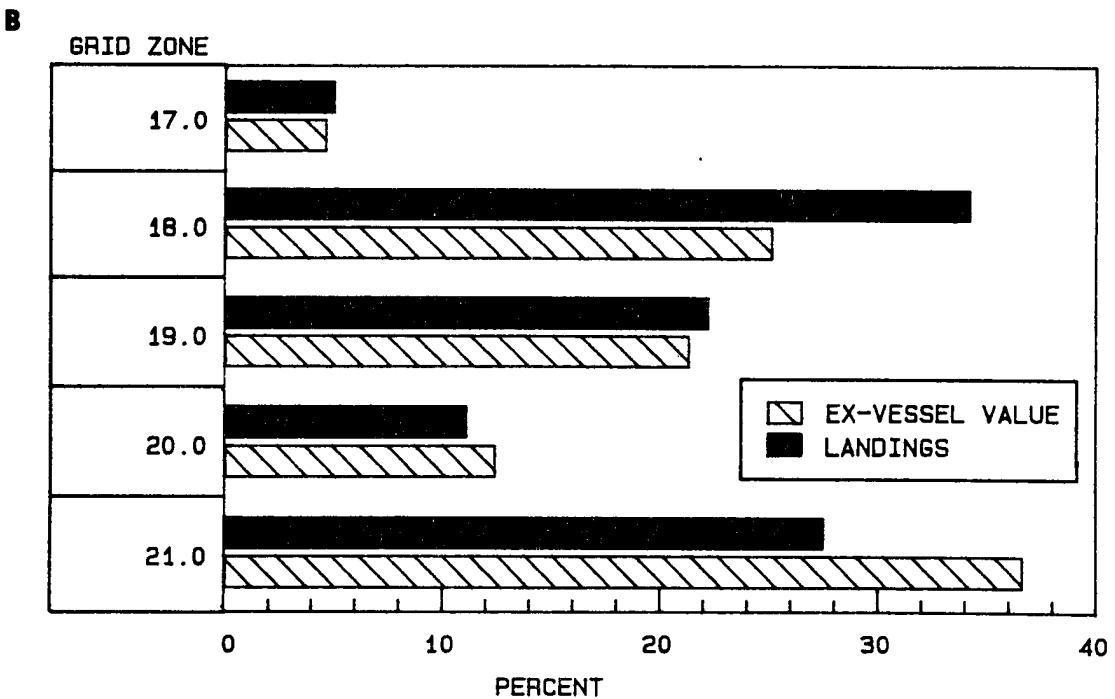
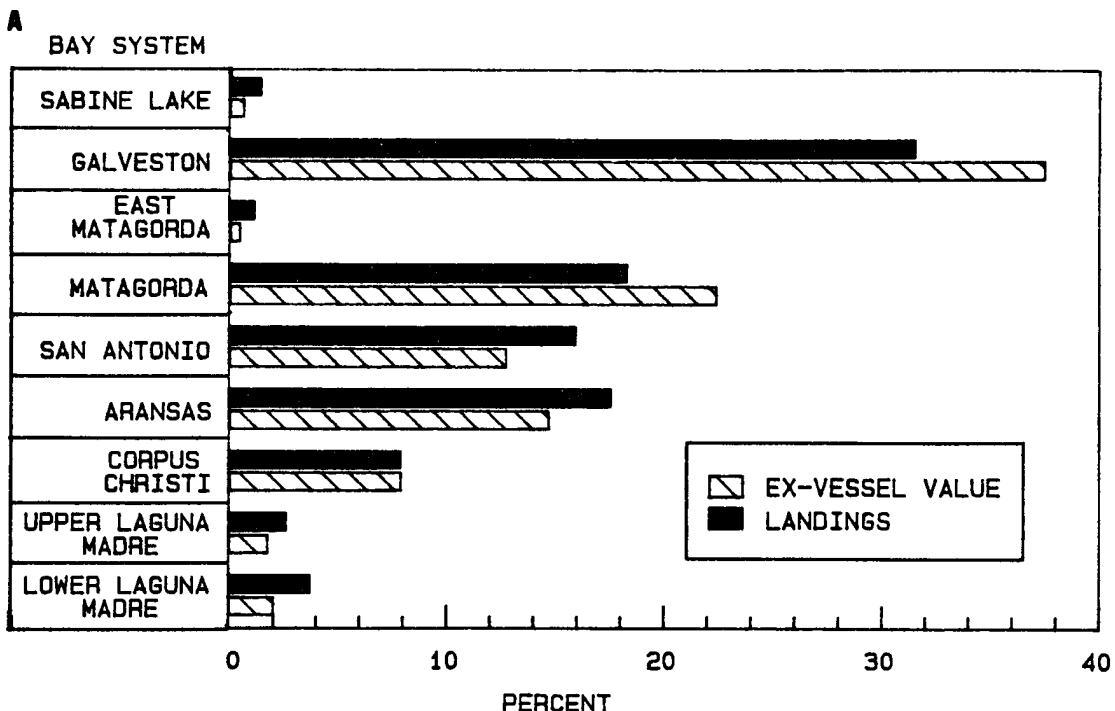
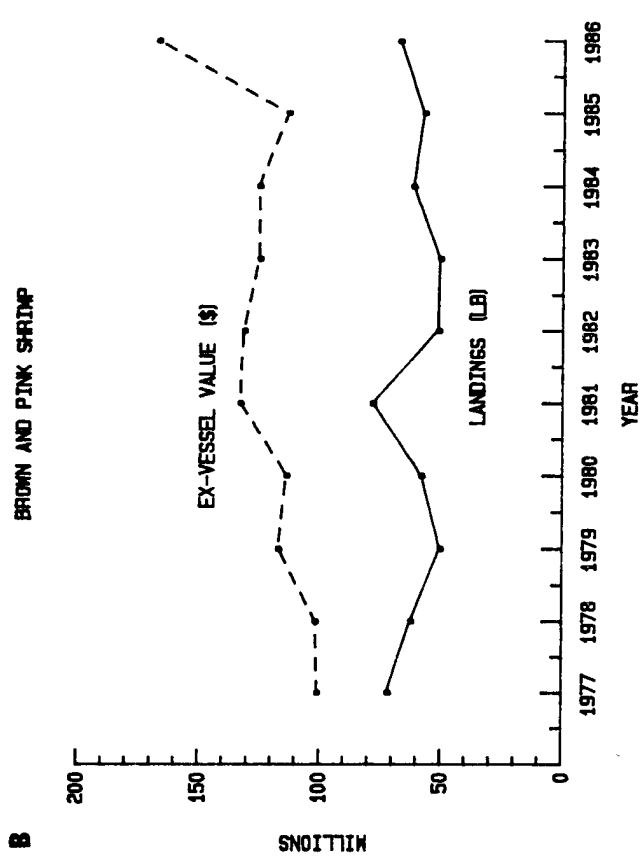


Figure 9.

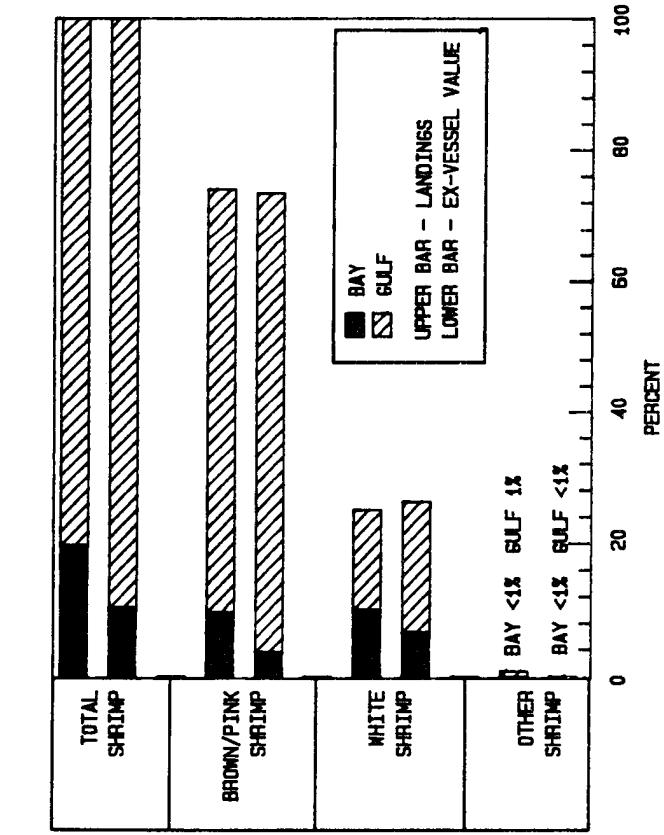
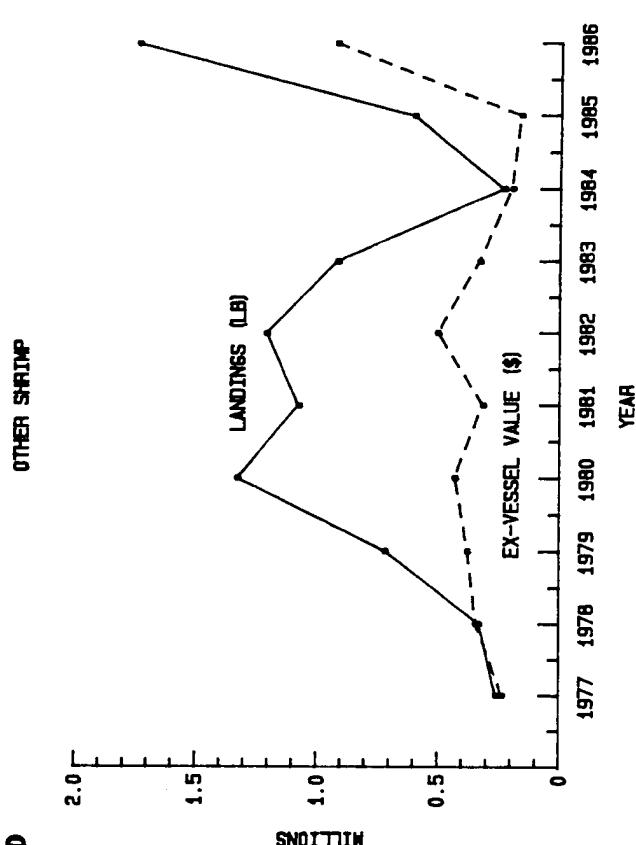
- A. A comparison of bay and Gulf landings and ex-vessel values for the major shrimp groups expressed as percents of their respective coastwide totals for 1977 through 1986.
- B. Texas commercial brown and pink shrimp landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.
- C. Texas commercial white shrimp landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.
- D. Texas commercial landings (lb) and ex-vessel values (\$) for unspecified shrimp (other shrimp) by year for 1977 through 1986.

Data for Figure 9 derived from NMFS surveys.

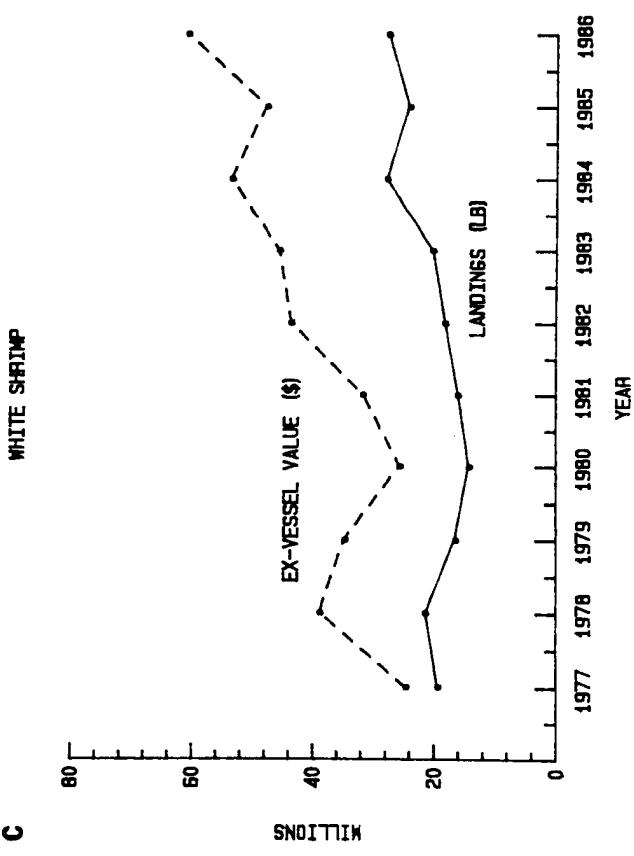
BROWN AND PINK SHRIMP



OTHER SHRIMP



WHITE SHRIMP



- Figure 10.**
- A. Texas commercial landings (lb) and ex-vessel values (\$) for all shrimp (total shrimp) by year for 1977 through 1986. Data derived from NMFS surveys.
 - B. Texas commercial blue crab landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.
 - C. Texas commercial Eastern oyster landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.
 - D. Texas commercial landings (lb) and ex-vessel values (\$) of unspecified shellfish (other shellfish) by year for 1977 through 1986.

Data for Figure 10.B-D derived from MMPR.

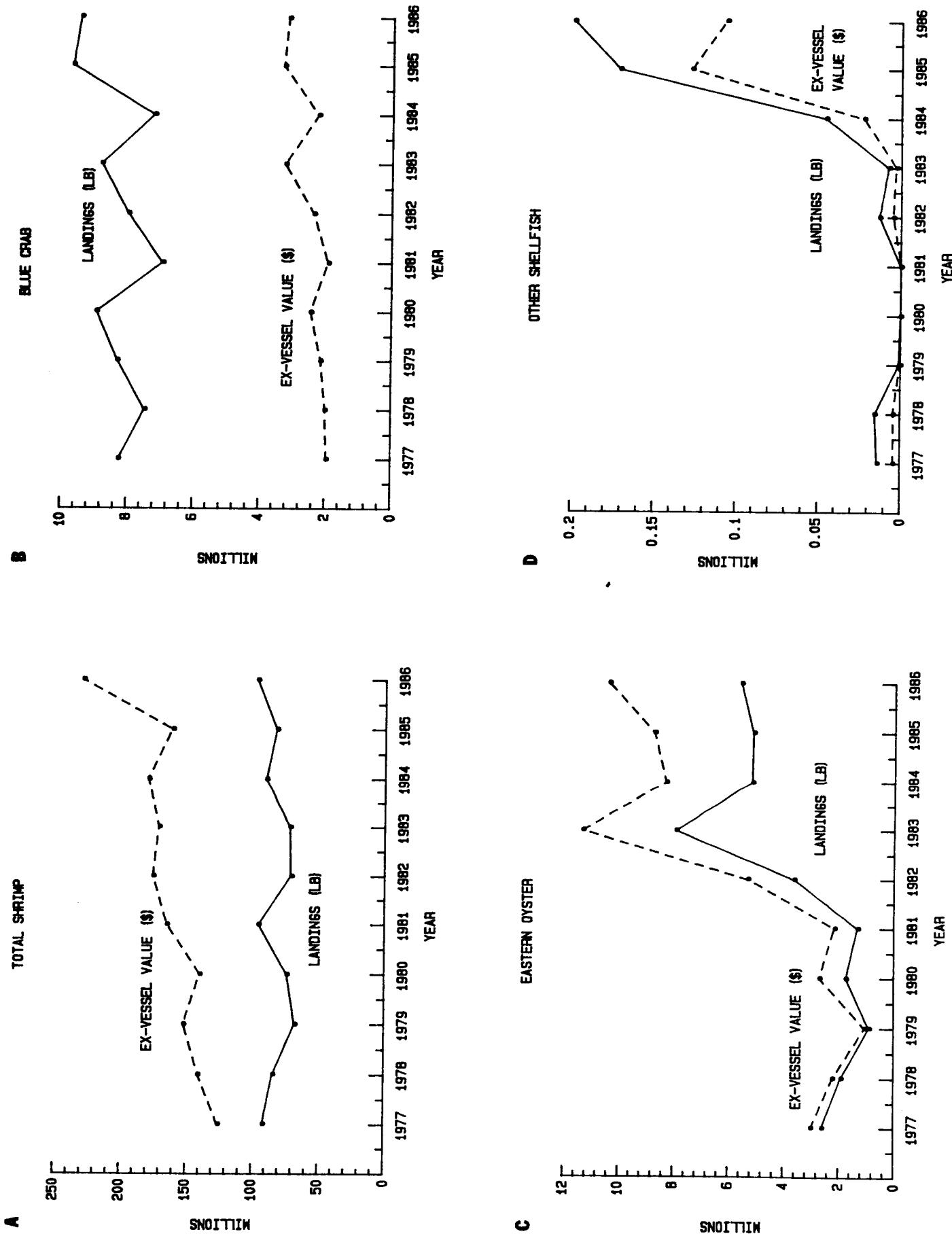
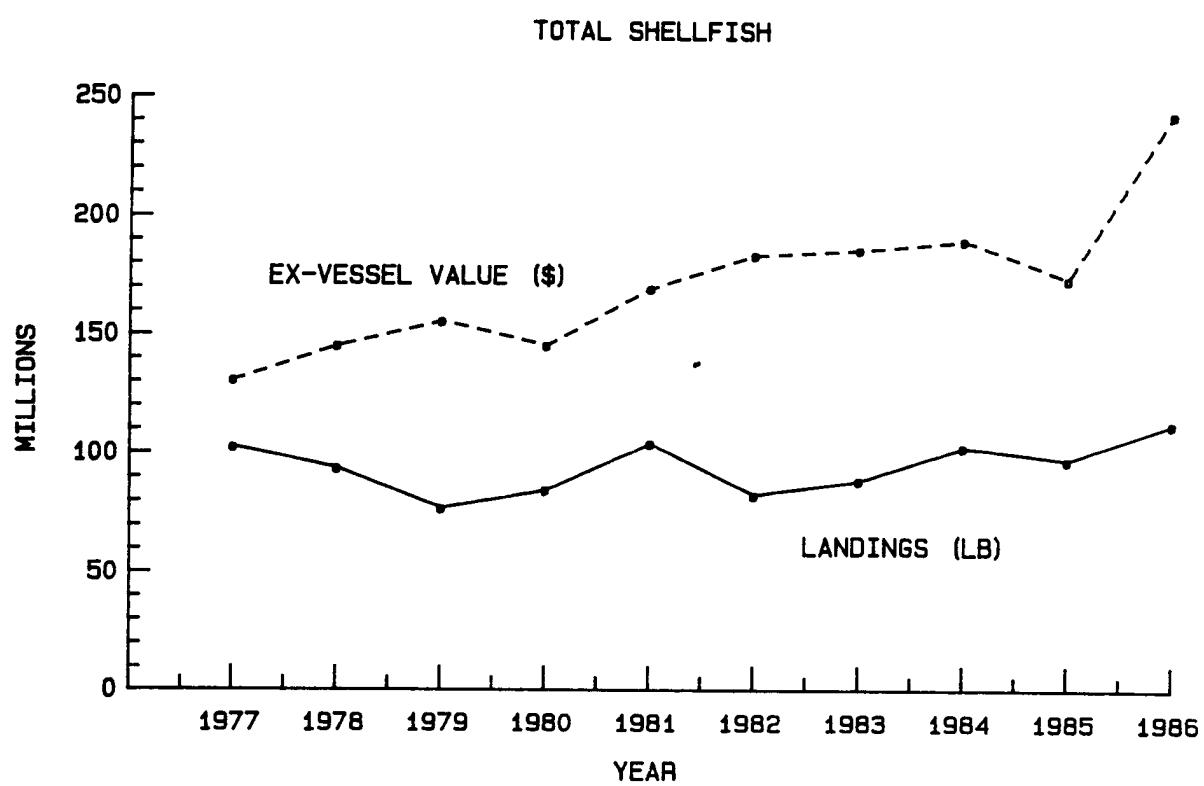
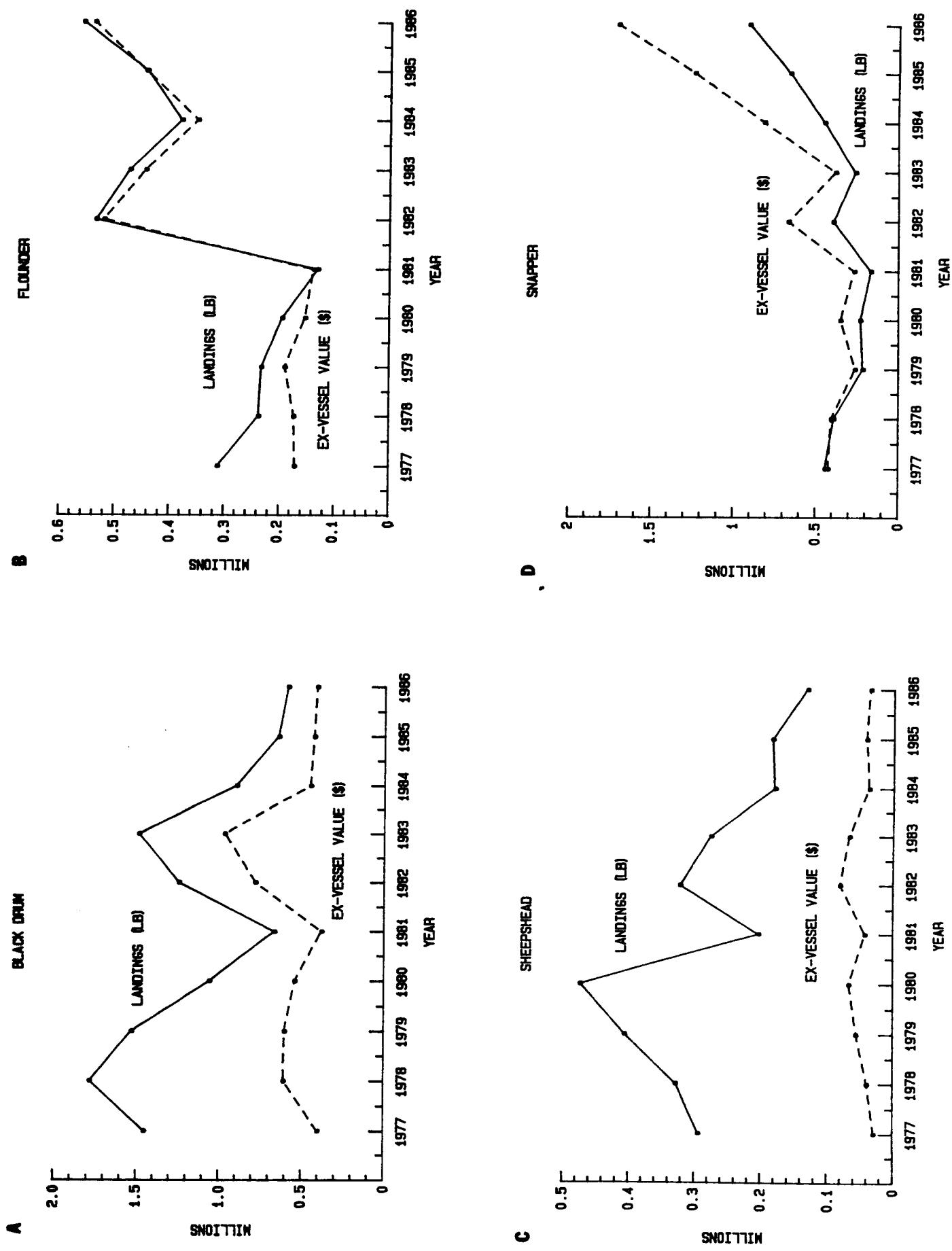


Figure 11. Texas commercial landings (lb) and ex-vessel values (\$) of all shellfish (total shellfish) by year for 1977 through 1986. Data derived from MMPR and NMFS surveys.



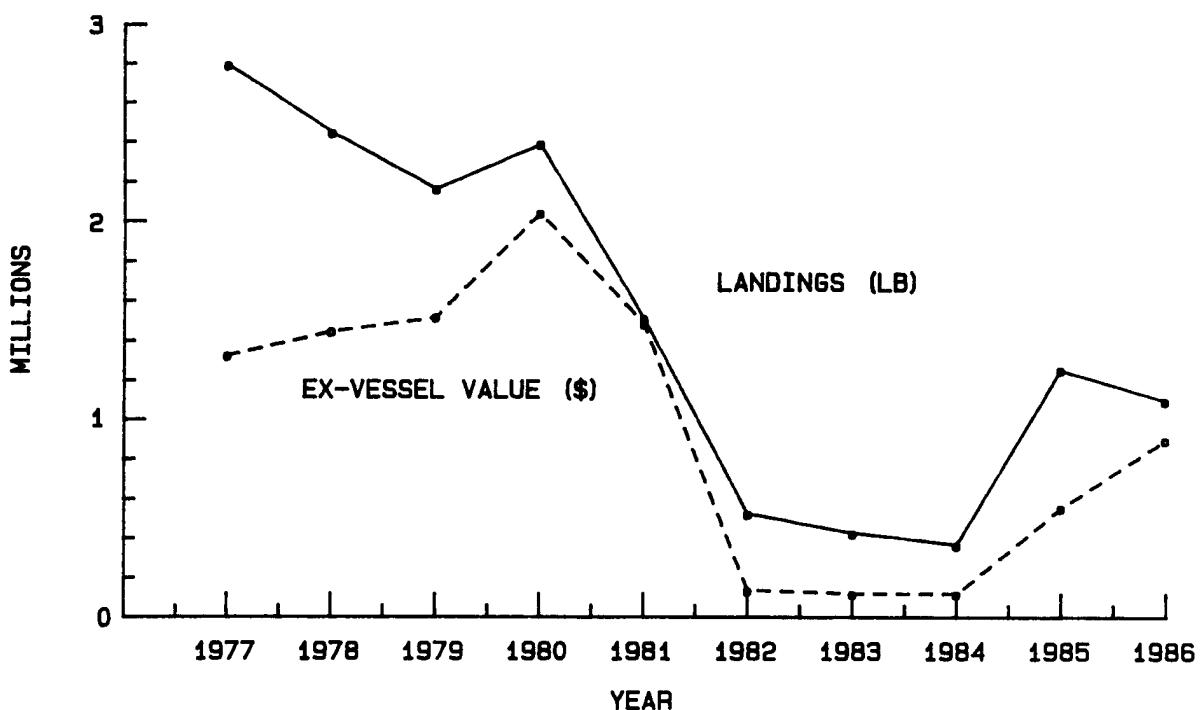
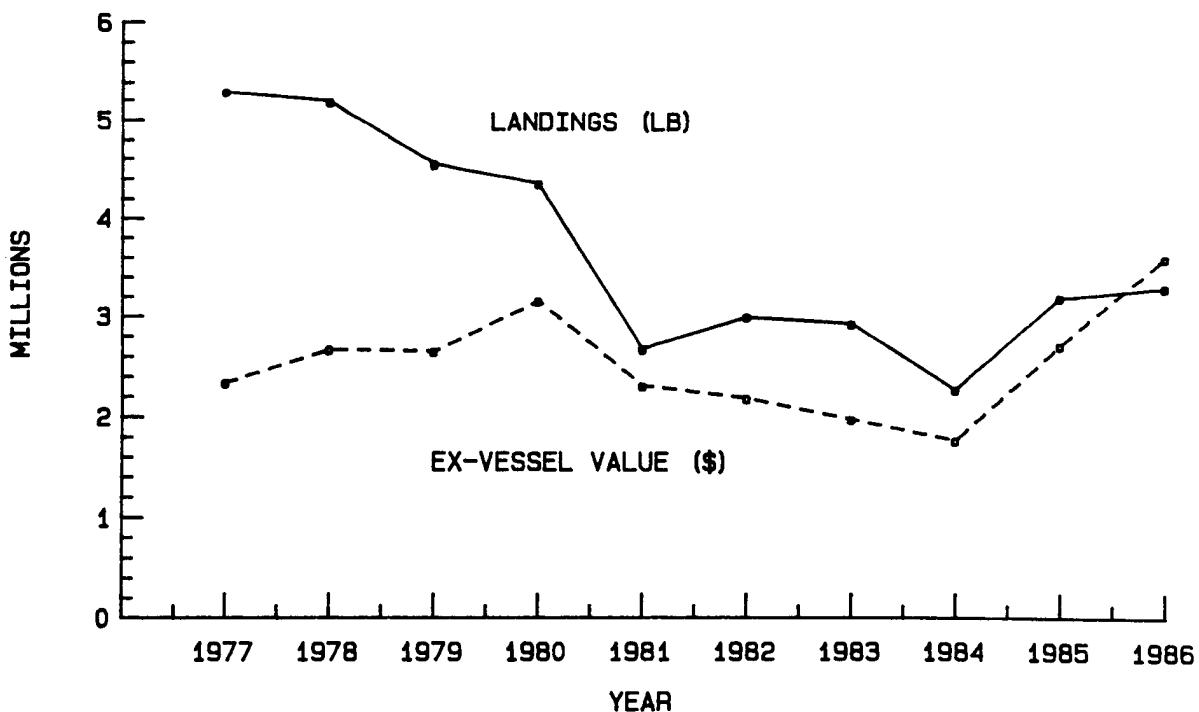
- Figure 12. A. Texas commercial black drum landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.
- B. Texas commercial flounder landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.
- C. Texas commercial sheepshead landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.
- D. Texas commercial snapper landings (lb) and ex-vessel values (\$) by year for 1977 through 1986.

Data for Figure 12 derived from MMPR.



- Figure 13. A. Texas commercial landings (lb) and ex-vessel values (\$) of unspecified finfish (other finfish) by year for 1977 through 1986.
- B. Texas commercial landings (lb) and ex-vessel values (\$) of all finfish (total finfish) by year for 1977 through 1986.

Data for Figure 13 derived from MMPR.

A**OTHER FINFISH****B****TOTAL FINFISH**

Appendix A. Conversion factors used for finfish and shellfish.

Table A.1. Factors for converting finfish gutted weight to live weight.

Species	Conversion factors (divide by)	Reference
Atlantic croaker	0.85	TPWD unpublished data
Black drum	0.88	Harrington et al. (1979)
Florida pompano	0.85	NMFS (1980)
King mackerel	0.85	NMFS (1980)
Kingfish	0.85	TPWD unpublished data
Red drum	0.88	Harrington et al. (1979)
Sand seatrout	0.87	TPWD unpublished data
Shark	0.83	NMFS (1980)
Sheepshead	0.85	Harrington et al. (1979)
Snapper	0.85	TPWD unpublished data
Southern Flounder	0.93	Harrington et al. (1979)
Spanish mackerel	0.84	NMFS (1980)
Spotted seatrout	0.87	Harrington et al. (1979)
Swordfish	0.80	NMFS (1980)
Tilefish	0.91	NMFS (1980)
Yellowfin tuna	0.90	NMFS (1980)

Table A.2. Factors for converting finfish headed or collared weight to live weight.

Species	Conversion factors (divide by)	Reference
Black drum	0.61	TPWD unpublished data
Cobia	0.70	NMFS (1980)
Gafftopsail catfish	0.65	TPWD unpublished data
Grouper	0.70	NMFS (1980)
Snapper	0.61	TPWD unpublished data

Table A.3. Factors for converting blue crab to live weight and Eastern oyster to meat weight (TPWD unpublished data).

Species	Conversion factors (divide by)
Blue crab	6 lb/1 dozen
Eastern oyster (to oyster meat)	17.5 lb/barrel
Eastern oyster (to oyster meat)	8.75 lb/gallon
Live Eastern oyster	1 barrel = 3 bushels, baskets, or sacks

Table A.4. Factors for converting shrimp heads-on weight to heads-off weight (Chin 1960).

Species	Conversion factors (divide by)
Brown shrimp	1.61
Pink shrimp	1.60
Rock shrimp	1.67
Royal red shrimp	1.80
Sea bob	1.53
White shrimp	1.54

Appendix B. Weight (lb) and ex-vessel value (\$) of commercial finfish and shellfish landings from Texas bay systems during 1977-1986.

Table B.1. Weight (lb) of each species landed commercially from Sabine Lake system during 1977-1986. Data based on MMR and NMFS.

Year	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Finfish			Shrimp			Shellfish			Grand total			
									Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other			
1977	980	687	0	39	139	37	0	934	0	0	2,816	2,336	4,212	9	6,548	226,100	0	0	232,648	235,464	
1978	0	330	0	0	59	114	0	0	0	0	503	0	2,763	0	2,763	624,171	0	0	626,934	627,437	
1979	556	51	9	9	764	60	56	274	0	248	2,027	0	0	0	163,301	0	0	163,301	165,328		
1980	48	78	124	0	627	240	60	1,776	50	30	3,033	1,099	49,900	4,668	55,667	70,089	0	0	125,756	128,789	
1981	219	119	0	0	76	238	12	461	230	45	1,400	12,830	43,248	0	56,078	72,624	0	0	128,702	130,102	
1982	0	0	0	0	0	0	0	0	0	0	0	0	170,835	488	171,323	113,443	0	0	284,786	284,786	
1983	379	567	0	0	430	1,201	0	0	0	140	2,717	0	740	0	740	172,874	0	0	173,614	176,331	
1984	244	176	0	0	1,588	0	0	0	0	0	2,008	12,384	10,451	0	22,835	555,304	0	0	578,159	580,147	
1985	486	2,283	0	0	1,592	552	0	62	94	275	5,344	0	21,169	0	21,169	673,758	0	0	694,927	700,271	
1986	154	2,056	0	0	1,874	914	0	258	0	0	5,256	539	7,925	0	8,464	1,345,792	0	0	763	1,355,019	1,360,275

52

Table B.2. Ex-vessel value (\$) of each species landed commercially from Sabine Lake system during 1977-1986. Data based on MMR and NMFS.

Year	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Finfish			Shrimp			Shellfish			Grand total			
									Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other			
1977	281	424	0	8	34	7	0	555	0	0	1,309	1,098	2,529	0	3,627	57,906	0	0	61,533	62,842	
1978	0	166	0	0	12	23	0	0	0	0	201	0	4,528	0	4,528	163,290	0	0	167,818	168,019	
1979	199	25	2	2	169	13	13	172	0	54	649	0	0	0	49,330	0	0	49,330	49,979		
1980	24	43	55	0	166	69	28	1,374	20	8	1,787	1,113	37,519	1,354	39,986	24,044	0	0	64,030	65,817	
1981	81	56	0	0	15	51	6	364	35	5	613	8,600	38,279	0	46,879	29,574	0	0	76,453	77,066	
1982	0	0	0	0	0	0	0	0	0	0	0	0	197,418	220	197,638	43,907	0	0	241,545	241,545	
1983	197	412	0	0	94	254	0	0	0	21	978	0	1,029	0	1,029	74,656	0	0	75,685	76,663	
1984	110	161	0	0	499	0	0	0	0	0	770	8,762	12,338	0	21,100	204,300	0	0	225,400	226,170	
1985	462	2,024	0	0	602	243	0	31	59	41	3,462	0	10,747	0	10,747	231,323	0	0	242,070	245,532	
1986	104	1,957	0	0	777	274	0	155	0	0	3,267	302	3,931	0	4,233	456,437	0	0	306	460,976	464,243

Table B.3. Weight (lb) of each species landed commercially from the Galveston Bay system during 1977-1986. Data based on MMPR and NMFS.

Year	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food			Scrap Total	Shrimp			Shellfish				
									Brown	Pink	White		Blue crab	Eastern oyster	Other	Total	Grand total			
1977	102,175	14,382	5,989	20,875	21,117	6,530	3,843	160,235	41,313	78,691	455,150	2,256,576	2,988,766	1,600	5,246,942	1,859,418	1,917,532	3,335	9,027,227	9,482,377
1978	161,887	55,173	8,937	32,554	55,504	4,647	1,946	362,499	75,265	49,282	807,694	2,066,133	3,618,523	0	5,684,656	1,920,886	1,076,797	3,528	8,685,867	9,493,561
1979	73,101	46,869	9,604	23,900	72,192	7,828	46,427	141,803	36,569	44,242	502,535	1,316,025	1,963,252	0	3,278,277	1,953,742	43,097	162	5,275,278	5,777,813
1980	55,999	31,477	5,204	34,421	65,844	5,824	2,251	105,870	29,028	39,496	375,414	2,317,775	3,439,745	0	5,757,520	1,749,057	1,004,208	0	8,510,785	8,886,199
1981	51,830	20,610	660	3,670	51,376	2,287	3,985	83,986	16,864	9,155	244,423	1,991,873	2,655,307	0	4,547,180	609,682	951,654	0	6,208,516	6,452,939
1982	72,524	197,762	59,168	13,477	125,942	47,889	118,907	2,733	19,897	45,080	703,379	1,646,158	3,459,392	0	5,105,550	1,216,137	3,253,765	9,942	9,585,394	10,288,773
1983	53,458	134,968	8,021	35,298	64,568	7,429	82,608	493	32,905	70,846	490,594	1,493,414	2,773,657	0	4,267,071	1,407,572	6,967,064	2,277	12,643,984	13,134,578
1984	269,046	127,753	1,797	17,895	74,948	1,968	50,296	3,193	16,495	22,400	585,791	2,558,708	3,604,281	0	6,162,989	1,396,583	2,360,205	8,340	9,928,117	10,513,908
1985	114,591	152,367	31,728	20,972	50,581	2,640	130,550	4,046	43,403 ^a	76,456	627,334	1,651,048	2,638,555	0	4,289,603	2,167,937 ^b	3,285,112	12,380	9,755,032	10,382,366
1986	31,279	137,488	36,603	11,522	34,354	1,890	61,460	9,381	23,869	76,649	424,495	2,043,085	4,108,323	1,452	6,152,860	3,018,315	3,538,808	47,377	12,757,360	13,181,855

^aIncludes 926 lb of sharkfins

^bIncludes 867 lb of soft shell crabs

Table B.4. Ex-vessel value (\$) of each species landed commercially from the Galveston Bay system during 1977-1986. Data based on MMPR and NMFS.

Year	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food			Scrap Total	Shrimp			Shellfish				
									Brown	Pink	White		Blue crab	Eastern oyster	Other	Total	Grand total			
1977	28,002	8,001	1,326	3,924	4,872	1,239	1,039	84,381	8,038	10,338	151,180	1,934,420	2,956,068	320	4,900,808	452,332	2,299,615	1,107	7,653,862	7,805,022
1978	48,796	43,424	1,075	6,676	10,514	238	212,370	14,780	5,792	344,456	778,260	4,977,027	0	5,755,287	521,289	1,222,871	987	7,500,434	7,844,890	
1979	23,318	41,204	1,594	5,353	10,809	1,779	4,946	116,290	8,345	8,879	217,517	1,144,900	2,648,695	0	3,793,595	481,825	66,788	37	4,312,245	4,559,762
1980	30,080	28,679	997	8,770	15,128	1,003	474	109,937	9,499	5,039	209,606	2,076,228	4,831,461	0	6,907,689	493,068	1,643,511	0	9,044,268	9,253,874
1981	30,788	23,711	171	771	14,056	659	234	96,993	4,696	1,223	175,302	1,018,256	3,107,981	0	4,126,237	187,155	1,510,186	0	5,823,578	5,998,880
1982	27,294	199,896	10,070	2,870	27,011	10,597	12,609	757	5,863	5,038	302,005	1,442,651	5,829,651	0	7,272,302	401,467	4,781,388	3,898	12,459,055	12,761,060
1983	25,117	125,378	2,382	7,202	14,099	1,843	8,963	174	11,894	10,738	207,790	1,503,153	3,935,332	0	5,438,485	521,558	9,946,284	1,113	15,907,440	16,115,230
1984	106,901	133,969	493	3,858	15,456	496	5,485	1,138	5,958	5,392	279,146	2,061,455	4,032,756	0	6,094,211	541,815	4,015,279	3,725	10,655,030	10,934,176
1985	89,814	158,633	5,729	4,574	12,506	775	14,658	1,844	17,246 ^a	7,156	312,935	1,324,169	2,964,202	0	4,288,371	829,473 ^b	5,958,146	6,523	11,082,513	11,395,448
1986	14,818	142,003	8,371	3,538	9,155	738	7,462	4,693	6,410	9,303	206,491	1,869,437	4,969,360	944	6,839,741	1,028,097	6,951,738	24,697	14,844,273	15,050,764

^aIncludes \$4,630 of sharkfins

^bIncludes \$637 of soft shell crabs

Table B.5. Weight (lb) of each species landed commercially from the Matagorda Bay system during 1977-1986. Data based on MMPR and NMFS.

Year	Finfish						Shrimp ^a						Shellfish						Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	Grand total
1977	17,489	19,184	400	1,536	5,290	0	1,196	68,541	1,047	2,040	116,723	1,008,551	2,621,280	0	3,629,831	211,227	168,605	1,937	4,011,600	4,128,323
1978	16,503	19,322	0	3,265	2,257	0	564	39,891	79	0	81,881	767,620	2,526,703	0	3,294,323	313,509	145,791	668	3,754,291	3,836,172
1979	10,150	6,593	0	867	2,997	0	270	33,972	0	0	54,849	2,546,059	2,832,037	0	5,378,096	680,808	120,937	14	6,179,855	6,234,704
1980	11,364	3,077	0	0	2,540	0	0	43,546	131	0	60,658	2,059,240	1,538,837	0	3,598,077	390,743	333,179	0	4,321,999	4,382,657
1981	6,047	553	3	41	287	1	18,379	19,406	10	55	44,782	1,521,424	1,746,315	0	3,267,739	368,089	88,659	0	3,724,487	3,769,269
1982	1,541	8,510	0	13	661	3	1,335	3	67	0	12,133	1,757,008	2,113,842	0	3,870,830	689,000	270,376	74	4,830,310	4,842,443
1983	1,696	13,692	31	15	241	10	3,516	402	271	0	19,874	3,204,889	3,614,158	0	6,819,047	796,690	199,940	109	7,815,786	7,835,650
1984	608	15,886	18	135	749	102	19,375	1,045	2,464	26,529	66,911	2,851,107	2,890,693	150	5,741,950	927,467	448,637	6,860	7,124,914	7,191,825
1985	8,092	28,824	0	545	5,786	100	117,938	11	500	157,301	319,097	2,194,857	2,678,970	2,707	4,876,534	989,229	123,350	7,266	5,996,379	6,315,476
1986	8,775	28,671	0	453	1,556	92	50,064	113	3,854	3,744	97,322	2,552,763	3,765,573	0	6,318,336	1,196,418	388,157	51,067	7,953,978	8,051,300

^aNMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

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Table B.6. Ex-vessel value (\$) of each species landed commercially from the Matagorda Bay system during 1977-1986. Data based on MMPR and NMFS.

Year	Finfish						Shrimp ^a						Shellfish						Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	Grand total
1977	4,774	12,470	120	305	1,240	0	344	39,237	210	306	59,006	353,186	2,488,878	0	2,842,054	52,248	188,224	657	3,083,193	3,142,199
1978	5,160	13,987	0	795	643	0	139	26,892	12	0	47,628	301,006	3,259,862	0	3,570,888	81,465	182,319	247	3,834,899	3,882,527
1979	4,021	5,928	0	326	579	0	34	27,906	0	0	38,794	2,190,100	3,920,487	0	6,110,587	180,569	146,205	5	6,437,366	6,476,160
1980	5,603	3,213	0	0	542	0	41,342	33	0	50,733	1,663,153	2,622,548	0	4,285,701	105,058	495,533	0	4,886,292	4,937,025	
1981	3,318	683	2	21	54	1	939	19,916	7	6	24,547	955,878	2,233,391	0	3,189,269	95,838	130,348	0	3,415,455	3,440,402
1982	1,214	9,459	0	8	432	1	282	2	44	0	11,442	1,471,573	4,017,106	0	5,488,679	209,954	389,590	0	6,088,243	6,099,685
1983	1,312	15,708	13	7	146	3	627	163	171	0	18,150	3,973,047	5,708,136	0	9,681,183	245,017	264,756	55	10,191,011	10,209,161
1984	411	20,304	9	72	298	43	1,760	736	181	1,896	25,710	1,933,896	3,852,312	260	5,786,468	302,472	732,038	2,495	6,823,73	6,849,183
1985	3,790	33,438	0	250	1,865	46	10,126	21	88	9,445	59,069	1,389,731	4,015,136	677	5,405,544	338,769	198,721	3,882	5,946,916	6,005,985
1986	6,628	34,206	0	211	674	36	4,832	115	232	47,159	2,432,679	6,228,565	0	8,661,244	371,892	599,597	21,965	9,654,698	9,701,857	

^aNMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

Table B.7. Weight (lb) of each species landed commercially from the East Matagorda Bay system during 1977-1986. Data based on NMFS and NMFS.

Year	Finfish						Shrimp ^a						Shellfish						Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	Grand total
1977	9,339	3,497	30	0	2,938	0	0	40,991	0	14,025	70,820	0	0	0	0	309,699	1,317	0	311,016	381,836
1978	9,593	3,103	0	0	1,964	0	0	35,008	0	0	49,688	0	0	0	0	267,668	578	0	268,246	317,914
1979	7,531	791	0	209	1,202	0	0	21,489	0	0	31,222	0	0	0	0	156,073	25,040	0	222,113	253,335
1980	4,248	390	0	0	487	0	1	38,138	0	0	43,264	0	0	0	0	468,952	2,722	0	471,674	514,938
1981	1,387	269	9	28	50	6	0	10,228	0	0	11,977	0	0	0	0	83,497	27,504	0	111,001	122,978
1982	1,975	11,758	0	1,474	1,540	0	0	34	1,352	0	18,133	0	0	0	0	630,153	0	0	630,153	648,266
1983	453	6,849	1	3	264	0	0	319	3	0	7,892	0	0	0	0	637,942	17,569	0	655,511	663,403
1984	199	2,958	0	178	221	33	0	18	25	0	3,642	0	0	0	0	317,525	58,317	2,114	377,956	381,598
1985	0	44	0	0	0	0	0	0	0	0	44	0	0	0	0	157,482	2,468	0	159,950	159,950
1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,000	0	0	3,000	3,000

^aNMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

Table B.8. Ex-vessel value (\$) of each species landed commercially from the East Matagorda Bay system during 1977-1986. Data based on NMFS and NMFS.

Year	Finfish						Shrimp ^a						Shellfish						Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	Grand total
1977	2,556	2,112	9	0	709	0	0	24,164	0	1,403	30,953	0	0	0	0	75,882	1,224	0	77,106	108,059
1978	2,759	2,276	0	0	550	0	0	22,530	0	0	28,115	0	0	0	0	66,482	792	0	67,274	95,389
1979	2,655	614	0	94	487	0	0	18,033	0	0	21,833	0	0	0	0	48,079	38,020	0	86,099	107,982
1980	1,770	392	0	0	206	0	0	35,545	0	0	37,913	0	0	0	0	123,063	3,861	0	126,924	164,837
1981	906	342	7	21	35	5	0	10,387	11	0	11,714	0	0	0	0	23,578	43,804	0	67,382	79,096
1982	1,454	10,815	0	1,105	1,088	0	0	22	1,351	0	15,835	0	0	0	0	189,697	0	0	189,697	205,532
1983	316	8,384	0	2	117	0	0	281	2	0	9,102	0	0	0	0	157,135	26,985	0	184,120	193,222
1984	142	3,188	0	80	99	15	0	14	13	0	3,551	0	0	0	0	73,935	96,489	519	170,943	174,494
1985	0	53	0	0	0	0	0	0	0	0	53	0	0	0	0	37,847	4,221	0	42,068	42,121
1986	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	900	0	0	900	900

^aNMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

Table B.9. Weight (lb) of each species landed commercially from the San Antonio Bay system during 1977-1986. Data based on NMNR and NMFS.

Year	Finfish										Shellfish										Grand total
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total		
1977	39,889	15,012	0	6,829	6,523	0	188	133,412	154	0	202,007	231,089	1,428,055	0	1,659,144	2,181,587	438,391	50	4,279,172	4,481,179	
1978	31,040	11,857	0	247	11,544	0	574	88,466	22	0	143,750	685,755	630,176	0	1,315,931	1,925,483	560,780	0	3,802,194	3,945,954	
1979	8,679	5,083	0	243	5,903	0	63,914	680	0	84,502	738,899	952,150	0	1,691,049	2,681,111	600,745	0	4,972,905	5,057,407		
1980	17,636	10,073	0	49	4,851	0	0	143,247	89	0	175,945	1,173,386	559,288	0	1,732,674	3,011,967	361,303	0	5,105,944	5,281,989	
1981	9,887	11,426	0	28	2,939	0	30,381	67,021	0	0	121,682	736,031	587,894	0	1,323,925	3,211,057	142,641	0	4,677,623	4,799,305	
1982	352	9,226	0	0	388	0	0	0	0	0	9,966	809,548	450,250	0	1,259,798	2,310,435	53,925	0	3,624,158	3,634,124	
1983	6,694	6,070	0	641	3,177	0	215	0	0	0	16,797	1,094,207	385,703	0	1,479,910	2,546,789	635,624	70	4,662,393	4,679,190	
1984	7,489	8,437	0	2,129	7,358	62	2,848	1,496	0	5,055	34,874	1,113,827	745,136	0	1,858,963	1,423,640	1,937,344	4,287	5,224,234	5,259,108	
1985	7,934	14,298	0	2,253	9,576	452	615	735	317	0	36,180	1,205,250	680,398	0	1,885,648	2,987,746	1,500,343	47,290	6,421,027	6,457,207	
1986	11,940	10,678	0	1,703	8,456	0	283	753	0	0	33,813	1,519,625	809,840	0	2,329,465	1,715,997	1,583,222	34,634	5,663,318	5,697,131	

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Table B.10. Ex-vessel value (\$) of each species landed commercially from the San Antonio Bay system during 1977-1986. Data based on NMNR and NMFS.

Year	Finfish										Shellfish										Grand total
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total		
1977	9,631	8,965	0	1,254	757	0	38	71,942	69	0	92,656	74,219	975,469	0	1,049,688	506,154	428,621	8	1,984,471	2,077,127	
1978	9,021	9,331	0	43	1,595	0	83	63,048	3	0	83,124	221,690	613,291	0	834,981	504,868	661,881	0	2,001,730	2,084,854	
1979	3,231	4,830	0	43	1,134	0	0	57,467	272	0	66,977	570,771	1,149,737	0	1,720,508	723,938	686,703	0	3,131,149	3,198,126	
1980	8,365	9,856	0	27	1,032	0	0	133,602	9	0	152,891	1,028,620	775,524	0	1,804,144	802,172	503,258	0	3,109,574	3,262,465	
1981	5,446	13,065	0	11	737	0	1,519	69,704	0	0	90,482	461,439	537,989	0	999,428	797,729	194,686	0	1,991,843	2,082,325	
1982	193	10,192	0	0	65	0	0	0	0	0	10,450	663,891	687,225	0	1,351,116	653,507	63,737	0	2,068,360	2,078,810	
1983	4,299	7,521	0	211	678	0	65	0	0	0	12,774	1,307,198	638,401	0	1,945,599	1,021,105	908,940	36	3,875,680	3,888,454	
1984	5,754	11,047	0	788	2,464	28	886	1,021	0	303	22,291	881,545	1,017,071	0	1,898,616	376,917	2,917,685	1,816	5,195,034	5,217,325	
1985	3,797	17,857	0	925	3,358	99	283	418	130	0	26,867	619,042	843,141	0	1,462,183	957,812	2,239,741	37,154	4,696,890	4,723,757	
1986	7,278	11,268	0	466	2,556	0	141	437	0	0	22,146	1,333,412	1,243,939	0	2,577,351	570,355	2,697,598	20,149	5,865,453	5,887,599	

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Table B.11. Weight (lb) of each species landed commercially from the Aransas Bay system during 1977-1986. Data based on MPR and NMFs.

Year	Finfish										Shrimp					Shellfish				
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified	Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total
1977	123,441	68,100	3,135	16,391	37,993	0	2,048	386,837	740	23,643	662,328	473,954	1,781,140	0	2,255,094	2,244,568	66,573	0	4,565,235	5,227,563
1978	81,282	41,200	3,680	4,445	33,778	4	1,870	244,282	235	10	410,796	659,810	993,356	0	1,653,166	2,051,177	119,994	0	3,824,337	4,235,123
1979	24,064	42,414	257	3,528	21,264	0	1,051	181,346	54	181	274,159	1,427,626	1,227,415	0	2,655,041	2,436,264	96,013	0	5,187,318	5,461,477
1980	36,919	58,005	18	1,752	11,954	0	14,951	249,484	337	223	373,643	1,010,885	824,648	0	1,835,533	2,716,056	21,588	0	4,573,177	4,946,820
1981	19,638	44,607	3	361	26,824	0	3,197	69,383	53	0	164,066	1,744,416	726,633	0	2,471,109	1,738,402	62,369	0	4,271,880	4,435,946
1982	36,491	119,852	258	542	59,483	0	8,851	0	0	0	225,477	1,916,457	841,457	0	2,757,914	2,150,379	51,509	125	4,959,927	5,185,404
1983	51,850	67,796	1,193	314	27,397	0	13,606	0	2,952	102	165,210	3,122,304	792,925	0	3,915,229	2,508,983	117,119	105	6,541,436	6,706,646
1984	16,790	75,233	0	102	5,510	0	0	0	0	0	97,635	2,789,635	1,747,920	0	4,537,555	2,129,660	359,952	2,400	7,029,567	7,127,202
1985	15,656	44,605	0	0	11,265	145	0	55	0	6,100	77,826	2,551,706	806,467	252	3,358,425	2,231,473	216,817	5,080	5,811,795	5,889,621
1986	47,641	90,467	0	2,325	15,980	517	33	38	28	732	157,761	2,365,073	1,591,075	0	3,956,148	936,042	97,126	6,938	4,996,254	5,154,015

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Table B.12. Ex-vessel value (\$) of each species landed commercially from the Aransas Bay system during 1977-1986. Data based on MPR and NMFs.

Year	Finfish										Shrimp					Shellfish				
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified	Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total
1977	33,415	40,208	469	2,731	2,654	0	102	229,823	124	1,317	310,843	159,139	1,395,300	0	1,554,439	505,799	65,103	0	2,125,341	2,436,184
1978	26,440	33,525	303	935	2,938	4	208	185,033	50	1	249,434	221,432	1,135,803	0	1,357,235	567,764	133,735	0	2,058,734	2,308,168
1979	9,094	34,294	44	885	2,720	0	105	163,013	6	18	210,179	1,148,755	1,746,314	0	2,895,069	613,601	108,704	0	3,617,374	3,827,553
1980	17,804	43,227	4	308	1,573	0	770	251,724	340	20	315,770	862,589	1,207,650	0	2,070,239	766,161	22,934	0	2,859,334	3,175,104
1981	12,343	53,451	1	91	6,151	0	458	79,428	13	0	151,936	925,332	876,325	0	1,801,657	547,211	91,656	0	2,440,524	2,592,460
1982	23,801	111,574	58	133	16,555	0	876	0	0	0	152,997	1,422,764	1,496,129	0	2,918,893	615,757	72,485	65	3,607,200	3,760,197
1983	30,276	64,576	239	78	3,876	0	1,497	0	2,650	15	103,207	3,818,816	1,429,216	0	5,248,032	937,186	183,905	61	6,369,184	6,472,391
1984	10,165	57,928	0	28	1,232	0	0	0	0	0	69,353	2,143,511	2,407,353	0	4,550,864	608,702	540,829	4,200	5,704,595	5,773,948
1985	12,594	45,195	0	0	2,174	62	0	31	0	610	60,666	1,428,731	1,234,636	144	2,663,511	743,747	342,310	6,263	3,755,831	3,816,497
1986	33,193	85,687	0	406	3,618	158	3	23	21	223	123,332	2,212,768	2,862,735	0	5,075,503	341,570	158,266	3,490	5,578,829	5,702,161

Table B.13. Weight (lb) of each species landed commercially from the Corpus Christi Bay system during 1977-1986. Data based on MMR and NMFS.

Year	Finfish						Shellfish						Grand total							
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total					
1977	199,848	49,128	3,206	14,989	116,863	57	73	151,054	0	0	535,218	738,572	567,956	0	1,306,528	102,750	0	0	1,409,278	1,944,496
1978	400,845	44,879	1,900	4,998	126,860	0	0	251,294	889	0	831,665	910,075	521,680	0	1,431,755	9,307	0	0	1,441,062	2,272,727
1979	383,315	68,726	3,489	9,946	201,684	6	34,680	216,751	41,854	0	960,451	1,166,697	1,052,891	0	2,219,588	50,498	0	116	2,270,202	3,230,653
1980	198,629	26,913	5,028	8,630	251,267	156	69,790	296,804	0	4,719	861,836	1,469,014	400,763	0	1,869,777	17,448	0	0	1,887,225	2,749,061
1981	58,074	5,948	75	2,560	51,927	179	23,592	183,843	128	69	326,395	1,149,681	336,542	0	1,486,223	7,723	0	0	1,493,946	1,820,341
1982	58,262	36,632	829	153	43,574	0	8,568	703	0	0	148,721	703,245	400,362	0	1,108,307	141,558	0	0	1,249,865	1,398,586
1983	105,884	74,422	7,763	1,247	87,195	0	0	176	0	0	276,687	1,135,421	466,130	0	1,601,551	231,757	0	35	1,833,343	2,110,030
1984	64,620	32,236	0	599	31,185	0	1,515	24	0	452	130,631	2,393,305	1,511,141	0	3,904,446	76,135	0	1,014	3,981,595	4,112,226
1985	29,309	86,770	4,115	3,087	39,254	31	4,422	198	572	10,720	178,478	1,404,056	274,707	0	1,678,763	132,786	0	78,237	1,889,786	2,068,264
1986	58,969	120,588	2	1,525	20,443	0	358	110	203	22,080	224,278	993,964	611,059	0	1,605,023	87,180	0	43,560	2,525,763	2,750,041

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Table B.14. Ex-vessel value (\$) of each species landed commercially from the Corpus Christi Bay system during 1977-1986. Data based on MMR and NMFS.

Year	Finfish						Shellfish						Grand total							
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total					
1977	59,310	29,921	334	1,482	7,736	3	4	89,617	0	0	188,407	301,665	442,067	0	743,732	25,810	0	0	769,542	957,949
1978	153,766	35,304	314	809	11,979	0	0	177,562	118	0	379,852	395,436	692,600	0	1,088,036	2,136	0	0	1,090,172	1,470,024
1979	165,498	55,662	676	1,823	25,873	2	2,561	191,436	5,324	0	448,855	1,040,520	1,646,614	0	2,687,134	10,907	0	23	2,698,054	3,146,919
1980	108,901	21,887	376	1,071	29,996	18	5,031	300,842	0	420	468,542	1,199,080	592,844	0	1,791,924	7,821	0	0	1,799,745	2,268,287
1981	34,388	6,029	16	674	7,862	9	2,118	196,317	26	10	247,449	788,033	439,698	0	1,227,731	3,852	0	0	1,231,563	1,479,032
1982	39,154	35,722	385	43	10,643	0	729	422	0	0	87,098	620,284	696,440	0	1,360,646	43,922	0	0	1,360,646	1,447,744
1983	68,616	72,871	1,225	291	22,969	0	0	35	0	0	166,037	1,419,771	896,636	0	2,316,407	93,369	0	18	2,409,794	2,575,831
1984	39,853	30,914	0	179	5,987	0	170	23	0	45	77,171	1,935,026	1,989,797	0	3,924,823	27,079	0	508	3,952,410	4,029,581
1985	23,816	82,572	826	958	7,759	2	444	187	139	1,156	117,859	1,016,137	366,652	0	1,382,789	44,890	0	59,735	1,487,414	1,605,273
1986	36,613	108,602	1	256	4,762	0	45	57	118	5,379	155,833	1,146,129	904,608	0	2,050,737	273,694	0	29,260	2,353,691	2,509,524

Table B.15. Weight (lb) of each species landed commercially from the upper Laguna Madre system during 1977-1986. Data based on MMPR and NMFS.

Year	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Finfish			Shrimp			Shellfish						
									Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	Grand total	
1977	519,296	5,205	104	23	41,537	0	495	320,747	32	0	887,439	0	0	0	126,811	0	0	0	126,811	1,014,250	
1978	558,383	4,166	253	2	24,681	0	2,337	203,146	0	0	792,968	0	0	0	159,517	0	0	0	159,517	952,485	
1979	562,558	3,362	655	65	31,619	0	0	222,193	0	0	820,452	0	0	0	26,911	0	0	0	26,911	847,363	
1980	512,366	8,559	2,079	409	46,722	0	0	446,515	0	0	1,016,650	0	0	0	6,688	0	0	0	6,688	1,023,338	
1981	343,717	5,031	931	93	35,306	4	2	266,387	0	0	651,471	0	0	0	0	0	0	0	0	651,471	
1982	778,749	21,881	16	0	60,695	0	0	296	0	0	861,637	0	0	0	8,913	0	0	0	8,913	870,550	
1983	1,021,586	50,078	6	0	80,860	0	0	739	0	0	1,153,259	0	0	0	12,290	0	0	0	12,290	1,165,559	
1984	373,819	28,287	0	1,049	43,586	0	0	520	0	0	447,261	0	0	0	19,727	0	0	0	19,727	466,988	
1985	284,762	17,998	0	296	36,410	0	0	1,802	0	0	341,268	0	0	0	172,326	92,515	0	0	400	265,241	606,509
1986	293,320	24,618	0	0	27,383	0	0	2,080	0	0	347,401	80,975	171	0	81,146	76,286	0	310	157,742	505,143	

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Table B.16. Ex-vessel value (\$) of each species landed commercially from the upper Laguna Madre system during 1977-1986. Data based on MMPR and NMFS.

Year	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Finfish			Shrimp			Shellfish					
									Unclassified Food	Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	Grand total
1977	165,429	3,278	10	3	3,130	0	50	186,747	8	0	358,655	0	0	0	28,855	0	0	0	28,855	387,510
1978	229,320	3,434	42	0	2,832	0	210	163,236	0	0	399,074	0	0	0	45,691	0	0	0	45,691	444,765
1979	244,455	3,313	130	12	5,234	0	0	206,136	0	0	459,280	0	0	0	6,836	0	0	0	6,836	466,116
1980	265,977	6,424	320	97	7,907	0	0	411,325	0	0	692,050	0	0	0	2,704	0	0	0	2,704	694,754
1981	199,140	5,604	223	21	7,458	1	0	293,345	0	0	505,792	0	0	0	0	0	0	0	0	505,792
1982	535,031	24,167	4	0	16,936	0	0	347	0	0	576,485	0	0	0	3,832	0	0	0	3,832	580,317
1983	708,865	53,945	1	0	22,018	0	0	1,060	0	0	785,889	0	0	0	6,074	0	0	0	6,074	791,963
1984	195,673	27,576	0	274	7,706	0	0	504	0	0	231,733	0	0	0	8,056	0	0	0	8,056	239,789
1985	164,458	18,348	0	122	7,321	0	0	1,695	0	0	191,944	107,763	1,313	0	109,076	30,883	0	200	140,159	332,103
1986	218,249	24,088	0	0	7,750	0	0	1,977	0	0	252,064	95,767	198	0	95,965	26,274	0	155	122,394	374,458

Table 8.17. Weight (lb) of each species landed commercially from the lower Laguna Madre system during 1977-1986. Data based on MMR and NMFS.

Year	Finfish						Shrimp						Shellfish						Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Brown Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	
1977	378,258	35,255	17,121	147	27,603	0	0	878,924	836	22,071	1,360,215	0	0	0	0	975,244	9,066	0	984,310	2,344,525
1978	492,760	12,552	5,004	4,928	60,371	0	824	754,432	3,555	2,322	1,336,748	0	0	0	0	196,070	3,071	64	199,205,	1,535,953
1979	434,749	32,867	2,356	190	45,826	0	0	706,426	2,731	170	1,225,315	0	0	0	0	122,279	1,963	0	124,242	1,349,557
1980	210,016	11,334	1,194	0	82,148	0	269	713,244	1,333	381	1,019,919	0	0	0	0	518,342	15,494	0	533,836	1,553,755
1981	157,654	10,855	526	3	24,770	3	5,700	523,315	1,651	346	724,880	0	0	0	0	815,087	0	0	815,087	1,539,967
1982	274,561	33,825	91	0	11,273	0	0	15	1,849	0	321,614	0	0	0	0	747,180	3,752	0	750,752	1,072,366
1983	238,784	44,935	2,473	0	8,089	109	126	4,180	5,922	379	304,997	0	0	0	0	479,092	3,433	0	482,525	787,522
1984	136,526	10,082	0	0	2,917	0	0	7	51	0	149,583	0	0	0	0	355,207	3,276	0	358,483	508,066
1985	171,176	22,383	0	0	2,567	2,316	0	149	3,419	0	202,010	0	0	0	0	258,041	5,847	2,840	266,728	468,738
1986	120,296	78,586	0	0	2,632	614	39	6,104	4,535	0	212,906	0	0	0	0	229,754	123	0	229,877	442,783

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Table 8.18. Ex-vessel value (\$) of each species landed commercially from the lower Laguna Madre system during 1977-1986. Data based on MMR and NMFS.

Year	Finfish						Shrimp						Shellfish						Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Other	Unclassified Food	Brown Scrap	Total	Brown and pink	White	Other	Total	Blue crab	Eastern oyster	Other	Total	
1977	84,443	16,294	1,056	30	2,138	0	0	421,397	93	5,518	530,969	0	0	0	0	239,526	8,957	0	248,483	779,452
1978	125,476	7,678	502	2,918	6,517	0	49	481,799	546	235	625,720	0	0	0	0	50,571	4,010	10	54,591	680,311
1979	141,050	27,732	269	38	4,958	0	0	566,319	413	15	73,794	0	0	0	0	30,801	2,235	0	33,036	770,830
1980	98,202	8,799	81	0	8,571	0	13	643,886	239	41	759,832	0	0	0	0	130,942	23,234	0	154,176	914,098
1981	86,390	11,614	94	1	3,882	1	570	600,430	290	58	703,330	0	0	0	0	234,290	0	0	234,290	937,620
1982	145,360	37,163	27	0	2,013	0	0	27	309	0	184,899	0	0	0	0	212,255	6,531	0	218,786	403,685
1983	126,297	45,586	346	0	1,111	35	57	1,295	1,820	51	176,598	0	0	0	0	183,548	5,796	0	189,344	365,942
1984	80,984	10,314	0	0	605	0	0	12	26	0	91,941	0	0	0	0	102,235	6,415	0	108,650	200,591
1985	122,416	24,370	0	0	670	579	0	284	2,679	0	150,998	0	0	0	0	86,400	11,732	4,080	102,212	253,210
1986	85,443	77,734	0	0	684	279	10	7,046	4,105	0	175,301	0	0	0	0	68,675	231	0	68,906	244,207

Appendix C. Weight (lb) and ex-vessel value (\$) of commercial finfish and shellfish, except shrimp, landings from the Gulf of Mexico grid zones during 1977-1986.

Table C.1. Weight (lb) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 17.0 during 1977-1986. Data based on MPR.

Year	Finfish										Shellfish			Grand total				
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Grouper	Snapper	Unclassified	Total	Blue crab	Other				
1977	5,810	2,888	386	50	1,615	4,805	0	200	629	36,211	3,864	0	0	56,458	0	0	0	56,458
1978	20,455	2,539	0	112	143	2,128	0	0	0	1,546	779	461	0	28,163	1,268	13	1,281	29,444
1979	114	1,176	0	77	587	418	0	0	0	3,222	3,277	0	0	8,871	100	0	100	8,971
1980	113	3,619	352	0	471	3,668	0	0	582	825	312	71	276	10,289	3,149	0	3,149	13,438
1981	71	2,816	29	562	532	1,250	619	0	4	235	129	0	515	6,762	5,860	0	5,860	12,662
1982	62	4,010	35	31	1,450	1,923	0	0	0	0	0	0	142	7,653	2,555	114	2,669	10,332
1983	247	3,715	8	23	474	1,082	0	0	0	5,549	0	468	860	12,426	5,355	150	5,505	17,931
1984	307	4,112	33	0	171	453	0	0	199	6,102	0	0	480	11,857	962	200	1,162	13,019
1985	20	9,021	0	52	194	2,828	0	0	14,515	17,193	3,738	1,021	425	49,007	2,211	71	2,282	51,289
1986	1,735	15,135	0	832	2,721	1,897	0	337	26,573	107,410	21,065	276	870	178,851	29,910	5,467	35,377	214,228

Table C.2. Ex-vessel value (\$) of each species, except shrimp, landed commercially in Gulf of Mexico grid zone 17.0 during 1977-1986. Data based on MPR.

Year	Finfish										Shellfish			Grand total				
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Grouper	Snapper	Unclassified	Food	Scrap	Total	Blue crab	Other	Total	Grand total
1977	1,558	1,529	93	10	331	966	0	50	159	32,954	2,030	0	0	39,680	0	0	0	39,680
1978	4,091	1,222	0	20	17	346	0	0	0	1,725	357	108	0	7,886	159	3	162	8,048
1979	23	622	0	15	139	66	0	0	0	4,280	3,943	0	0	9,088	30	0	30	9,118
1980	16	2,242	36	0	53	463	0	0	262	1,170	197	18	42	4,499	694	0	694	5,193
1981	17	1,562	7	112	142	150	71	0	1	458	90	0	123	2,733	1,520	0	1,520	4,253
1982	21	2,236	9	8	302	315	0	0	0	0	0	0	26	2,917	742	46	788	3,705
1983	70	2,224	3	6	106	181	0	0	0	9,062	0	70	120	11,842	2,545	60	2,605	14,447
1984	94	3,316	8	0	38	91	0	0	328	11,051	0	0	72	14,998	333	140	473	15,471
1985	5	7,180	0	14	49	1,154	0	0	21,108	33,148	2,646	348	63	65,715	888	28	916	66,631
1986	1,160	12,129	0	284	861	540	0	234	36,454	209,633	15,037	187	183	276,702	15,376	3,136	18,512	295,214

Table C.3. Weight (lb) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 18-0 during 1977-1986. Data based on NMFS.

Year	Finfish										Shellfish			Grand total				
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Grouper	Snapper	Other	Unclassified Food	Scrap	Total	Blue crab	Other	Total	
1977	28,861	55,084	2,266	10,128	24,444	20,513	535	13,865	8,158	97,198	141,503	53,797	38,864	495,216	11,038	7,813	18,851	514,067
1978	4,955	32,429	5,390	1,634	8,924	16,089	1,340	10,124	17,470	100,449	45,442	18,781	35,905	298,932	502	11,164	11,666	310,598
1979	14,324	20,653	3,742	331	17,147	6,038	2,753	5,629	7,020	62,133	90,923	25,831	62,236	318,760	417	577	994	319,754
1980	7,181	35,081	13	434	4,856	9,424	1,076	1,700	13,957	58,750	44,102	10,763	8,546	195,883	485	0	485	196,368
1981	4,900	16,644	0	2,081	6,657	10,178	9,881	8,289	4,796	20,996	8,271	1,067	4,167	97,927	519	0	519	98,446
1982	4,683	56,556	0	1,373	15,794	19,301	3,204	15,532	10,477	97,911	346	12,312	0	237,489	48	1,340	1,431	238,920
1983	2,137	37,650	160	4,565	2,254	8,738	19,922	6,997	6,876	97,665	31	621	0	187,626	26,709	1,288	27,997	215,623
1984	3,048	32,968	1,198	2,757	7,403	9,518	9,350	5,542	5,822	50,802	3,537	0	0	131,945	26,378	13,380	39,758	171,703
1985	5,452	27,510	1,665	12,005	8,062	12,214	39,653	1,097	14,389	104,567	33,104	2,601	3,839	266,158	21,566	7,031	28,597	294,755
1986	2,132	19,608	2,207	4,044	7,013	9,214	3,621	6,260	30,075	313,156	120,104	2,052	1,489	520,975	40,587	3,556	44,143	565,118

Table C.4. Ex-vessel value (\$) of each species landed commercially from Gulf of Mexico grid zone 18.0 during 1977-1986. Data based on MPR.

Table C.7. Weight (lb) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 20.0 during 1977-1986. Data based on MPR.

Year	Finfish										Shellfish			Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Grouper	Snapper	Other	Unclassified Food	Scrap	Total	
1977	116	298	0	0	0	0	100	0	0	0	0	337	0	851	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	1,136	403	0	0	616	0	0	0	0	0	0	0	2,155	0	2,155
1983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	4,603	13,843	0	262	2,577	1,591	0	745	5,680	76,541	3,073	0	0	1,450	1,450
1985	1,510	7,738	277	815	16,764	2,292	3,000	2,091	77,469	157,944	40,356	53	5	310,304	3,409
1986	7,818	21,322	0	3,338	7,817	253	0	3,305	89,844	218,273	169,507	71	0	521,548	2,206
														523,754	

Table C.8. Ex-vessel value (\$) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 20.0 during 1977-1986. Data based on MPR.

Year	Finfish										Shellfish			Grand total	
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Grouper	Snapper	Other	Unclassified Food	Scrap	Total	
1977	35	149	0	0	0	5	0	0	0	0	173	0	0	362	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	682	383	0	0	0	0	0	0	0	1,170	0	0	0	2,235	0
1983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	1,367	10,451	0	69	516	268	0	500	4,959	143,496	2,644	0	0	164,270	0
1985	1,315	5,879	56	293	2,762	273	300	1,642	55,950	314,561	43,012	53	1	426,097	1,507
1986	5,001	18,368	0	1,034	2,524	91	0	2,350	71,021	438,102	116,944	52	0	655,487	0
														963	963
														656,450	

Table C.9. Weight (lb) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 21.0 during 1977-1986. Data based on MPR.

Year	Finfish								Shellfish			Grand total			
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Groupers	Snapper	Other Food	Unclassified	Blue crab	Other	Total
1977	17,966	9,091	163	36	5,909	412	0	1,775	9,673	248,811	3,245	16,379	0	313,460	0
1978	3,326	2,856	4,721	25,144	1,129	438	26,351	339	11,467	216,627	393	7,470	0	300,261	0
1979	3,659	2,651	0	0	2,935	170	0	0	4,582	108,134	1,205	1,766	341	125,443	0
1980	3,357	4,134	0	0	64	33	0	0	3,335	101,584	556	279	0	113,342	0
1981	7,972	8,590	2,350	0	1,894	26	0	0	14,194	94,833	17,519	33,359	0	180,737	0
1982	18,158	16,070	338	38	722	1,069	0	0	24,708	117,550	0	51,941	535	231,129	0
1983	6,563	8,339	170	1,002	237	229	418	9	5,531	76,920	6	28,852	0	128,276	460
1984	21,717	3,240	0	115	627	294	0	41	8,130	184,674	18,260	21,754	0	258,852	0
1985	2,408	12,070	0	5,179	332	884	0	0	26,276	267,274	44,165	814	0	359,402	0
1986	3,007	6,617	331	4,089	900	2,989	207	153	36,698	197,243	69,878	1,020	0	323,132	6,356
													703	7,059	330,191

Table C.10. Ex-vessel (\$) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 21.0 during 1977-1986. Data based on MPR.

Year	Finfish								Shellfish			Grand total			
	Black drum	Flounder	Atlantic croaker	Gafftopsail catfish	Sheepshead	Kingfish	Mullet	Cobia	Groupers	Snapper	Other Food	Unclassified	Blue crab	Other	Total
1977	2,270	2,647	24	7	430	59	0	197	2,014	262,676	1,054	1,753	0	273,131	0
1978	596	1,262	472	12,227	169	43	1,917	119	3,217	243,850	487	829	0	265,188	0
1979	549	1,245	0	0	294	9	0	0	3,111	139,154	2,049	690	34	147,135	0
1980	1,018	2,260	0	0	10	15	0	0	1,549	157,616	454	42	0	162,964	0
1981	3,207	6,911	470	0	189	5	0	0	6,471	164,486	24,585	6,929	0	213,253	0
1982	6,289	13,173	54	8	143	117	0	0	20,257	227,404	0	12,543	72	280,060	0
1983	3,039	6,377	32	601	39	58	60	9	4,869	110,355	10	6,547	0	131,996	245
1984	6,112	2,421	0	35	103	29	0	29	5,939	335,990	9,285	6,208	0	366,151	0
1985	693	11,411	0	3,624	53	343	0	0	19,723	490,793	18,327	2,829	0	547,796	0
1986	1,135	5,355	83	2,870	142	1,444	315	134	35,537	358,484	51,685	984	0	458,158	2,161
													247	2,408	460,576

Appendix D. Monthly commercial finfish and shellfish landings (lb) and ex-vessel value (\$) from Texas bay systems during 1986.

Table D.1. Weight (lb) of each species landed commercially from the Sabine Lake System during 1986. Data based on MAFR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	120	34	0	0	0	0	0	0	0	0	0	0	154
Flounder, unclassified	258	38	177	134	161	0	269	54	376	439	0	150	2,056
Kingfish, unclassified	0	0	914	0	0	0	0	0	0	0	0	0	914
Seatrout, sand	0	0	0	0	0	0	0	0	258	0	0	0	258
Sheepshead	0	542	18	0	0	0	0	0	176	588	0	550	1,874
Total finfish	378	614	1,109	134	161	0	269	54	810	1,027	0	700	5,256
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	0	0	539	0	0	0	0	0	0	0	539
White	0	0	0	0	40	0	0	0	7,500	0	385	0	7,925
Total Shrimp	0	0	0	0	579	0	0	0	7,500	0	385	0	8,464
Blue crab	14,427	21,601	15,751	142,002	188,278	281,954	136,486	112,350	122,790	134,852	132,534	42,767	1,345,792
Oyster, Eastern	0	0	0	0	0	0	0	0	0	0	0	0	0
Squid, unclassified	0	0	0	0	0	0	0	0	0	159	0	0	159
Stone crab	0	0	0	0	604	0	0	0	0	0	0	0	604
Total shellfish	14,427	21,601	15,751	142,072	189,461	281,954	136,486	112,350	130,290	135,011	132,919	42,767	1,355,019
Grand Total	14,805	22,215	16,860	142,206	189,622	281,954	136,755	112,404	131,100	136,038	132,919	43,467	1,360,275

Table D.2. Ex-vessel value (\$) of each species landed commercially from the Sabine Lake system during 1986. Data based on MPRR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	84	20	0	0	0	0	0	0	0	0	0	0	104
Flounder, unclassified	245	36	168	127	153	0	256	51	357	414	0	150	1,957
Kingfish, unclassified	0	0	274	0	0	0	0	0	0	0	0	0	274
Seatrout, sand	0	0	0	0	0	0	0	0	155	0	0	0	155
Sheepshead	0	217	7	0	0	0	0	0	70	235	0	248	777
Total finfish	329	273	449	127	153	0	256	51	582	649	0	398	3,267
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	0	0	0	302	0	0	0	0	0	0	302
White	0	0	0	0	0	102	0	0	3,675	0	154	0	3,931
Total Shrimp	0	0	0	0	0	404	0	0	3,675	0	154	0	4,233
Blue crab	5,768	8,655	6,295	56,865	56,570	82,332	44,206	39,642	43,685	45,870	47,929	18,620	456,437
Oyster, Eastern	0	0	0	0	0	0	0	0	0	0	0	0	0
Squid, unclassified	0	0	0	0	0	0	0	0	0	0	0	0	64
Stone crab	0	0	0	0	0	242	0	0	0	64	0	0	242
Total shellfish	5,768	8,655	6,295	56,937	57,216	82,332	44,206	39,642	47,360	45,934	48,083	18,620	460,976
Grand Total	6,097	8,928	6,744	57,064	57,369	82,332	44,462	39,693	47,942	46,583	48,083	19,018	464,243

Table D.3. Weight (lb) of each species landed commercially from the Galveston Bay system during 1986. Data based on NMPPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic croaker	100	34	158	366	2,167	3,379	8,341	8,710	9,710	2,889	665	84	36,603
Atlantic moonfish	0	0	0	11	92	0	0	0	0	0	0	0	103
Black drum	0	0	0	0	450	0	0	0	0	0	0	0	450
Florida pompano	0	0	0	1,256	193	1,672	664	455	540	296	4	0	5,080
Flounder, unclassified	2,209	665	1,002	3,800	3,673	3,852	2,761	6,145	6,216	28,334	70,172	8,659	137,488
Gafftopsail catfish	0	470	98	1,109	4,077	2,521	270	71	52	274	1,618	962	11,522
Gulf butterfish	0	0	0	0	0	0	68	0	0	0	0	0	68
Kingfish, unclassified	201	5	16	0	19	45	22	127	342	373	377	363	1,890
Mackerel, Spanish	0	0	0	0	0	0	3	0	0	0	0	0	3
Mullet, unclassified	5	505	4,928	1,405	1,233	7,920	10,755	16,086	11,711	4,914	1,091	907	61,460
Shark, unclassified	0	0	0	0	16	0	0	0	0	0	0	0	16
Seatrout, sand	0	79	1,583	0	89	56	29	52	401	359	697	316	3,661
Sheepshead	1,735	2,017	4,132	4,638	1,403	485	874	1,522	2,021	4,514	5,918	5,095	34,354
Unclassified food	1,012	470	395	675	2,488	701	3,595	3,175	4,155	5,063	1,771	369	23,869
Unclassified scrap	25	18	315	5,723	2,093	5,144	8,932	18,091	22,358	12,563	538	849	76,649
Total finfish	5,894	6,135	17,038	20,394	24,538	26,036	37,754	56,043	61,626	62,764	85,748	20,525	424,495
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	29,511	96,171	170,673	50,980	315,991	1,122,694	1,052,964	802,573	431,405	15,223	4,108,323
White	18,272	1,866	0	0	0	0	0	0	0	0	0	1,452	1,452
Other	0	0	0	0	0	0	0	0	0	0	0	82,990	6,152,860
Total Shrimp	18,272	1,866	29,511	102,562	721,902	859,771	718,542	1,278,287	1,087,989	819,119	432,049	0	5,298
Atlantic bay scallop	1,040	0	4,227	31	0	0	0	0	0	0	0	0	0
Blue crab	86,011	71,427	109,099	300,994	579,481	495,239	565,668	300,385	202,482	151,449	113,318	42,762	3,018,315
Oyster, Eastern	522,420	430,998	417,347	397,973	120,472	282,766	176,611	203,910	136,378	181,844	582,312	85,717	3,538,808
Squid, unclassified	51	115	1,863	4,578	5,224	1,828	399	444	3,276	999	466	405	19,648
Stone crab	372	982	1,224	1,176	920	1,296	2,048	5,564	5,391	1,966	1,136	356	22,431
Total shellfish	628,166	505,388	563,271	807,244	1,427,999	1,640,900	1,463,268	1,788,590	1,435,516	1,155,377	1,129,341	212,230	12,757,360
Grand Total	634,060	511,523	580,309	827,638	1,452,537	1,666,936	1,501,022	1,844,633	1,497,142	1,218,141	1,215,089	232,755	13,181,855

Table D.4. Ex-vessel value (\$) of each species landed commercially from the Galveston Bay system during 1986. Data based on NMFS and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
At lantic croaker	28	6	16	49	650	531	3,686	1,376	1,220	674	110	25	8,371
At lantic moonfish	0	0	0	6	37	0	0	0	0	0	0	0	43
At lantic spadefish	0	0	0	0	180	0	0	0	0	0	0	0	180
Black drum	346	901	2,129	746	2,084	124	696	715	2,609	1,042	1,752	1,674	14,818
Florida pompano	0	0	0	691	228	934	336	298	535	289	2	0	3,313
Flounder, unclassified	2,100	675	1,128	3,564	3,491	3,995	2,811	6,529	6,413	28,826	74,174	8,297	142,003
Gafftopsail catfish	0	354	48	341	906	539	81	25	20	96	647	481	3,538
Gulf butterfish	0	0	0	0	0	0	0	27	0	0	0	0	27
Kingfish, unclassified	126	1	4	0	7	18	7	62	112	155	155	91	738
Mackerel, spanish	0	0	0	0	0	1	0	0	0	0	0	0	1
Mullet, unclassified	1	118	510	268	184	842	1,513	1,877	1,433	500	120	96	7,462
Shark, unclassified	0	0	0	0	5	0	0	0	0	0	0	0	5
SeatROUT, sand	0	23	474	0	44	26	7	19	103	95	224	109	1,124
Sheepshead	652	655	1,329	1,254	340	124	173	392	462	1,080	1,358	1,336	9,155
Unclassified food	499	207	130	185	569	161	900	833	1,046	1,362	443	75	6,410
Unclassified scrap	11	8	76	707	662	733	972	2,292	2,411	1,236	89	106	9,303
Total finfish	3,763	2,948	5,844	7,811	9,387	8,028	11,209	14,418	16,364	35,355	79,074	12,290	206,491
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	4,598	321,202	642,868	425,531	309,419	101,684	22,998	2,061	39,126	1,869,437	
White	11,204	1,044	51,558	208,832	263,527	151,149	232,604	1,180,875	1,438,516	1,031,645	379,944	14,462	4,969,360
Other	0	0	0	0	0	0	0	0	0	0	0	944	944
Total Shrimp	11,204	1,044	51,558	213,380	584,729	794,017	658,135	1,494,294	1,540,200	1,054,643	382,005	54,532	6,839,741
Atlantic bay scallop	1,300	0	1,057	6	0	0	0	0	0	0	0	0	2,363
Blue crab	41,744	29,993	47,310	115,033	189,153	151,027	173,838	100,104	71,076	52,674	40,224	15,921	1,028,097
Oyster, Eastern	935,147	776,750	770,663	731,402	219,676	521,662	339,372	392,684	263,589	349,344	1,435,440	216,009	6,951,738
Squid, unclassified	20	65	995	2,833	2,716	947	217	272	1,547	372	250	288	10,522
Stone crab	280	800	1,028	961	828	787	871	2,243	2,358	989	548	11,812	
Total shellfish	989,695	808,652	872,611	1,063,383	997,102	1,468,440	1,172,433	1,989,587	1,878,770	1,468,022	1,898,467	286,869	14,844,273
Grand Total	993,458	811,600	878,455	1,071,194	1,006,489	1,476,468	1,183,642	2,004,015	1,895,134	1,493,377	1,937,541	299,159	15,050,764

Table D.5. Weight (lb) of each species landed commercially from the Matagorda Bay system during 1986. Data based on NMPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	4,813	0	258	2,642	912	68	0	0	0	0	67	15	8,775
Florida pompano	0	80	0	19	0	0	0	0	0	0	0	0	99
Flounder, unclassified	211	173	542	1,127	1,463	1,672	2,828	3,106	2,079	3,315	5,076	7,079	28,671
Gafftopsail catfish	0	0	0	4	269	115	0	65	0	0	0	0	453
Kingfish, unclassified	0	0	0	26	18	0	47	0	1	0	0	0	92
Mullet, unclassified	17,783	0	0	175	0	0	277	75	0	298	14	31,442	50,064
SeatROUT, sand	0	0	0	14	0	0	0	0	0	0	0	0	14
Sheepshead	0	0	10	236	371	121	271	306	67	147	9	18	1,556
Unclassified food	0	0	0	0	0	23	0	0	0	0	3,831	0	3,854
Unclassified scrap	0	0	0	0	0	0	0	0	0	0	0	0	3,744
Total finfish	22,807	253	810	4,243	3,033	1,999	3,423	3,552	2,147	3,760	8,997	42,298	97,322
SHELLFISH													
Shrimp (heads on)													
Brown and pink	974	0	4,363	115,322	799,079	1,290,878	336,077	0	0	0	306	5,764	2,552,763
White	63	293	2,550	31,311	63,362	10,498	112,549	1,176,840	981,963	730,994	564,402	90,748	3,765,573
Total Shrimp	1,037	293	6,913	146,633	862,441	1,301,376	448,626	1,176,840	981,963	730,994	564,708	96,512	6,318,336
Blue crab	29,455	7,989	35,009	215,568	167,946	168,161	171,730	103,670	103,970	82,351	67,485	43,084	1,196,418
Oyster, Eastern	213,257	24,449	125,967	22,103	385	0	0	0	0	0	0	1,996	388,157
Squid, unclassified	50	0	0	482	89	113	15	0	235	56	417	0	1,457
Stone crab	30	50	45,092	170	20	312	640	280	15	40	1,505	1,456	49,610
Total shellfish	243,829	32,781	212,981	384,956	1,030,881	1,469,962	621,011	1,280,790	1,086,183	813,441	634,115	143,048	7,953,978
Grand Total	266,636	33,034	213,791	389,199	1,033,914	1,471,961	624,434	1,284,342	1,088,330	817,201	643,112	185,346	8,051,300

³NMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

Table D. 6. Ex-vessel value (\$) of each species landed commercially from the Matagorda Bay system during 1986. Data based on NMPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	5,054	0	194	800	455	82	0	0	0	0	36	7	6,628
Florida pompano	0	108	0	4	0	0	0	0	0	0	0	0	112
Flounder, unclassified	234	177	732	1,389	1,979	2,245	3,702	4,249	2,797	4,346	5,487	6,869	34,206
Gafftopsail catfish	0	0	1	121	69	0	20	0	0	0	0	0	211
Kingfish, unclassified	0	0	0	5	8	0	21	0	2	0	0	0	36
Mullet, unclassified	1,673	0	0	26	0	0	28	8	0	265	2	2,830	4,832
Seatrout, sand	0	0	0	3	0	0	0	0	0	0	0	0	3
Sheepshead	0	0	3	91	167	52	117	138	30	66	2	8	674
Unclassified food	0	0	0	0	0	2	0	0	0	0	230	0	232
Unclassified scrap	0	0	0	0	0	0	0	0	0	0	225	225	
Total finfish	6,961	285	929	2,319	2,730	2,450	3,868	4,415	2,829	4,677	5,757	9,939	47,159
SHELLFISH													
Shrimp (heads on) ^a													
Brown and pink	506	0	8,115	207,594	641,800	1,276,208	283,828	0	0	0	679	13,949	2,432,679
White	113	199	5,100	80,833	111,671	36,124	96,104	2,128,516	1,840,766	1,119,806	694,292	115,041	6,228,565
Total Shrimp	619	199	13,215	288,427	753,471	1,312,332	379,932	2,128,516	1,840,766	1,119,806	694,971	128,990	8,661,244
Blue crab	9,052	2,908	12,953	76,220	52,072	50,871	51,740	30,996	27,771	24,725	20,334	12,250	371,892
Oyster, Eastern	329,373	40,354	88,925	36,548	660	0	0	0	0	0	0	3,737	599,597
Squid, unclassified	13	0	0	7,241	22	30	4	0	106	14	230	0	7,660
Stone crab	20	38	12,219	111	18	172	403	136	5	15	527	641	14,305
Total shellfish	339,077	43,499	227,312	408,547	806,243	1,363,405	423,079	2,159,648	1,868,648	1,144,560	716,062	145,618	9,654,698
Grand Total	346,038	43,784	228,241	410,896	808,973	1,365,855	435,947	2,164,063	1,871,477	1,149,237	721,819	155,557	9,701,857

^aNMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

Table D.7. Weight (lb) of each species landed commercially from the East Matagorda Bay system during 1986. Data based on MMPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FIN FISH													
Total fin fish	0	0	0	0	0	0	0	0	0	0	0	0	0
SHELLFISH^a													
Blue crab	0	0	0	0	0	0	160	0	0	0	0	0	3,000
total shellfish	0	0	0	0	0	0	0	0	0	0	0	0	3,000
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	3,000

^aNMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

Table D.8. Ex-vessel value (\$) of each species landed commercially from the East Matagorda Bay system during 1986. Data based on NMMPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Total finfish	0	0	0	0	0	0	0	0	0	0	0	0	0
SHELLFISH^a													
Blue crab	0	0	0	0	0	0	0	0	0	0	0	0	900
Total shellfish	0	0	0	0	0	0	0	0	0	0	0	0	900
Grand total	0	0	0	0	0	0	0	0	0	0	0	0	900

^aNMFS reports East Matagorda Bay system shrimp landings as combined with Matagorda Bay system shrimp landings.

Table D.9. Weight (lb) of each species landed commercially from the San Antonio Bay system during 1986. Data based on MPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	93	0	0	1,372	287	1,082	639	488	782	2,382	2,570	2,245	11,940
Florida pompano	0	0	0	0	0	0	0	0	0	0	0	158	158
Flounder, unclassified	18	6	0	40	352	1,873	0	1,766	1,032	2,945	2,646	0	10,678
Gaff topsail catfish	0	0	0	22	0	632	252	363	412	22	0	0	1,703
Mullet, unclassified	100	0	0	0	5	13	79	30	0	48	8	0	283
Seatout, sand	83	0	0	0	0	25	0	0	0	210	164	113	595
Sheepshead	502	1,794	0	395	98	802	532	422	158	1,217	2,255	281	8,456
Total finfish	796	1,800	0	1,829	742	4,427	1,502	3,069	2,384	6,824	7,643	2,797	33,813
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	31,369	203,100	812,279	437,986	33,867	0	0	0	0	0	1,024
White	0	0	0	45	3,203	23	136,167	218,800	185,657	155,040	106,825	4,080	809,840
Total Shrimp	0	0	31,369	203,145	815,482	438,009	170,034	218,800	185,657	155,040	106,825	5,104	2,329,465
Blue crab	104,273	45,950	165,612	16,387	0	313,911	270,885	197,260	197,077	220,638	184,004	0	1,715,997
Oyster, Eastern	343,967	215,008	210,947	360,905	0	0	0	0	0	0	0	0	1,583,222
Squid, unclassified	0	0	5	0	33	0	0	0	0	0	0	0	38
Stone crab	7,274	13	15,209	0	234	1,060	7,030	3,776	0	0	0	0	34,596
Total shellfish	455,514	260,971	423,137	580,442	815,716	753,013	447,949	419,836	382,734	375,678	290,829	457,499	5,663,318
Grand Total	456,310	262,771	423,137	582,271	816,458	757,440	449,451	422,905	385,118	382,502	298,472	460,296	5,697,131

Table D.10. Ex-vessel value (\$) of each species landed commercially from the San Antonio Bay system during 1986. Data based on NMFS and MMR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	70	0	0	406	200	812	479	366	688	1,548	1,362	1,347	7,278
Florida pompano	0	0	0	0	0	0	0	0	0	0	0	111	111
Flounder, unclassified	17	7	0	56	493	2,154	0	2,031	1,342	2,945	2,223	0	11,268
Gafftopsail catfish	0	0	0	6	0	190	66	91	107	6	0	0	466
Mullet, unclassified	50	0	0	0	1	7	40	15	0	24	4	0	141
SeatROUT, sand	54	0	0	0	0	13	0	0	0	137	72	50	326
Sheepshead	151	610	0	138	34	281	181	148	54	426	474	59	2,556
Total finfish	342	617	0	606	728	3,457	766	2,651	2,191	5,086	4,135	1,567	22,146
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	40,152	286,371	522,576	440,084	43,410	0	0	0	0	0	819
White	0	0	0	140	6,598	78	182,137	391,652	316,840	200,002	143,146	3,346	1,333,412
Total Shrimp	0	0	40,152	286,511	529,174	440,162	225,547	391,652	316,840	200,002	143,146	4,165	3,346
Blue crab	28,154	12,407	44,715	6,391	0	107,036	92,116	68,663	69,120	77,327	64,426	0	570,355
Oyster, Eastern	519,849	332,389	328,975	584,925	0	0	0	0	0	0	0	0	931,460
Squid, unclassified	0	0	0	3	0	17	0	0	0	0	0	0	2,697,598
Stone crab	5,456	8	4,106	0	234	1,007	7,241	2,077	0	0	0	0	20,129
Total shellfish	553,459	344,804	417,948	877,830	529,408	548,222	324,904	462,392	385,960	277,329	207,572	935,625	5,865,453
Grand Total	553,801	345,421	417,948	878,436	530,136	551,679	325,670	465,043	388,151	282,415	211,707	937,192	5,887,599

Table D.11. Weight (lb) of each species landed commercially from the Aransas Bay system during 1986. Data based on MNR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	2,272	971	4,130	6,062	1,955	2,124	912	30	1,187	3,212	19,148	5,338	47,641
Flounder, unclassified	2,721	1,227	1,884	2,395	3,036	3,161	8,552	447	6,527	8,946	35,745	15,826	90,467
Gafftopsail catfish	0	0	107	1,646	306	266	0	0	0	0	0	0	2,325
Kingfish, unclassified	34	0	0	352	103	28	0	0	0	0	0	0	517
Mullet, unclassified	0	33	0	0	0	0	0	0	0	0	0	0	33
Seatrout, sand	0	0	0	0	38	0	0	0	0	0	0	0	38
Sheepshead	793	3,700	57	2,330	0	193	178	12	740	804	4,208	2,965	15,980
Unclassified food	0	0	0	28	0	0	0	0	0	0	0	0	28
Unclassified scrap	0	0	202	0	0	0	0	0	0	0	530	0	732
Total finfish	5,820	5,931	6,380	12,813	5,438	6,072	9,642	489	8,454	12,962	59,531	24,129	157,761
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	23,266	301,762	1,172,553	721,560	144,224	0	1,708	0	0	0	2,365,073
White	0	0	32	0	1,782	29,830	126,036	587,990	330,193	360,305	141,602	13,305	1,591,075
Total shrimp	0	0	23,298	301,762	1,174,355	751,390	270,260	587,990	331,901	360,305	141,602	13,305	3,956,148
Blue crab	119,674	44,332	113,076	76,885	69,148	105,821	96,085	70,706	61,066	61,994	62,982	54,293	936,042
Oyster, Eastern	30,853	26,023	32,130	8,120	0	0	0	0	0	0	0	0	97,126
Squid, unclassified	0	0	74	47	183	0	5	9	0	42	36	11	407
Stone crab	0	0	0	4	0	0	66	2,289	1,920	648	668	936	6,531
Total shellfish	150,527	70,355	168,578	386,818	1,243,666	857,211	366,416	660,994	394,887	422,989	205,268	68,545	4,996,254
Grand Total	156,347	76,286	174,958	399,631	1,249,104	863,283	376,058	661,483	403,341	435,951	264,899	92,674	5,154,015

Table D.12. Ex-vessel value (\$) of each species landed commercially from the Aransas Bay system during 1986. Data based on MMPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	1,888	910	3,410	5,562	1,857	2,212	918	26	1,208	2,739	9,946	2,517	33,193
Flounder, unclassified	2,547	1,302	2,317	2,792	3,264	3,796	10,395	322	7,889	8,470	30,460	12,073	85,687
Gaff topsail catfish	0	0	27	265	61	53	0	0	0	0	0	0	406
Kingfish, unclassified	12	0	0	106	26	14	0	0	0	0	0	0	158
Muller, unclassified	0	3	0	0	0	0	0	0	0	0	0	0	3
Seatrout, sand	0	0	0	0	23	0	0	0	0	0	0	0	23
Sheepshead	159	925	26	506	0	39	39	3	208	219	903	591	3,618
Unclassified food	0	0	0	21	0	0	0	0	0	0	0	0	21
Unclassified scrap	0	0	0	0	0	0	0	0	0	0	0	0	23
Total finfish	4,606	3,200	5,950	9,252	5,231	6,114	11,352	351	9,305	11,428	41,362	15,181	123,332
SHELLFISH													
Shrimp (heads on)													
Brown and pink	0	0	41,413	289,692	980,923	707,129	191,818	0	1,793	0	0	0	0
White	0	0	115	0	5,466	68,609	147,462	1,181,860	643,876	626,931	169,922	18,494	2,212,768
Total Shrimp	0	0	41,528	289,692	986,389	775,738	339,290	1,181,860	645,669	626,931	169,922	18,494	2,862,735
Blue crab	35,152	12,770	38,750	27,725	31,117	35,312	42,555	22,904	23,330	22,995	25,901	23,059	341,570
Oyster, Eastern	50,336	42,380	52,326	13,224	0	0	0	0	0	0	0	0	158,266
Squid, unclassified	0	0	21	35	63	0	1	3	0	19	18	7	167
Stone crab	0	0	0	3	0	0	50	1,248	968	324	307	423	3,323
Total shellfish	85,488	55,150	132,625	330,679	1,017,569	811,050	381,886	1,206,015	669,967	650,269	196,148	41,983	5,578,829
Grand Total	90,094	58,350	138,575	339,931	1,022,800	817,164	393,238	1,206,366	679,272	661,697	237,510	57,164	5,702,161

Table D.13. Weight (lb) of each species landed commercially from the Corpus Christi Bay system during 1986. Data based on NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic croaker	0	0	0	0	0	0	0	0	0	0	0	0	2
Black drum	6,147	10,829	4,939	227	44	0	268	682	276	3,141	24,016	8,400	58,969
Florida pompano	0	0	0	0	0	13	0	0	0	0	0	0	13
Flounder, unclassified	3,822	108	1,132	106	187	1,053	509	151	947	7,676	79,846	25,051	120,588
Gafftopsail catfish	0	0	5	0	0	0	0	0	0	266	1,254	0	1,525
Mullet, unclassified	0	263	0	0	0	0	0	0	0	0	95	0	358
Shark, unclassified	0	0	0	0	0	0	0	0	0	0	74	0	74
SeatROUT, sand	0	20	0	0	0	0	0	0	0	0	3	0	23
Sheepshead	1,073	199	4,714	25	187	107	292	251	183	1,020	7,977	4,415	20,443
Unclassified food	30	35	0	62	0	0	0	37	25	0	0	14	203
Unclassified scrap	2,969	14	0	2,976	2,154	3,077	904	7,417	980	913	676	0	22,080
Total finfish	14,041	11,468	10,790	3,396	2,572	4,250	1,973	8,538	2,677	14,009	112,684	37,850	224,278
SHELLFISH													
Shrimp (heads on)													
Brown and pink	1,600	18,770	165,949	182,293	283,864	215,819	116,257	3,233	0	741	361	5,077	993,964
White	0	0	32	319	959	5,943	5,169	136,426	111,038	107,196	218,454	25,463	611,059
Total Shrimp	1,600	18,770	165,981	182,672	284,823	221,762	121,426	139,659	111,038	107,937	218,815	30,540	1,605,023
Blue crab	90	10,684	0	26,259	188,358	183,550	223,961	115,072	38,057	21,696	32,851	36,602	877,180
Squid, unclassified	498	5	0	1,304	862	426	86	80	242	32	91	11	3,637
Stone crab	2,038	2,100	1,200	262	613	600	2,414	6,124	12,708	2,436	6,380	3,048	39,923
Total shellfish	4,226	31,559	167,181	210,497	474,656	406,338	347,887	260,935	162,045	132,101	258,137	70,201	2,525,763
Grand Total	18,267	43,027	177,971	213,893	477,228	410,588	349,860	269,473	164,722	146,110	370,821	108,081	2,750,041

Table D.14. Ex-vessel value (\$) of each species landed commercially from the Corpus Christi Bay system during 1986. Data based on MPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic croaker	0	0	0	0	0	0	0	0	0	1	0	0	1
Black drum	4,491	7,247	3,087	150	48	0	236	600	267	2,196	12,733	5,558	36,613
Florida pompano	0	0	0	0	0	12	0	0	0	0	0	0	12
Flounder, unclassified	3,913	96	1,252	111	191	1,459	735	182	1,184	7,424	70,032	22,023	108,602
Gafftopsail catfish	0	0	2	0	0	0	0	0	0	53	201	0	256
Mullet, unclassified	0	26	0	0	0	0	0	0	0	0	19	0	45
Shark, unclassified	0	0	0	0	0	0	0	0	0	0	31	0	31
SeatROUT, sand	0	13	0	0	0	0	0	0	0	0	1	0	14
Sheepshead	210	42	1,417	6	56	37	63	67	39	256	1,662	907	4,762
Unclassified food	8	12	0	59	0	0	0	19	13	0	0	7	118
Unclassified scrap	148	1	0	1,173	1,020	645	1,020	445	231	355	341	0	5,379
Total finfish	8,770	7,437	5,758	1,499	1,315	2,153	2,054	1,313	1,787	10,434	84,818	28,495	155,833
SHELLFISH													
Shrimp (heads on)													
Brown and pink	2,352	28,295	286,261	283,556	198,026	179,130	152,297	7,533	0	2,005	379	6,295	1,146,129
White	0	0	115	974	3,244	22,999	9,563	244,203	151,012	160,794	279,621	32,083	904,608
Total Shrimp	2,352	28,295	286,376	284,530	201,270	202,129	161,860	251,736	151,012	162,799	280,000	38,378	2,050,737
Blue crab	27	3,523	0	7,921	59,965	55,737	72,484	34,473	9,969	6,517	10,987	12,091	273,694
Squid, unclassified	364	5	0	351	304	126	26	25	75	29	29	10	1,344
Stone crab	2,530	2,625	1,500	275	680	750	2,719	3,312	6,791	1,366	3,616	1,752	27,916
Total shellfish	5,273	34,448	287,876	293,077	262,219	258,742	237,089	289,546	167,847	170,711	294,632	52,231	2,353,691
Grand Total	14,043	41,855	293,634	294,576	263,534	260,895	239,143	290,859	169,634	181,145	379,450	80,726	2,509,524

Table D.15. Weight (lb) of each species landed commercially from the upper Laguna Madre system during 1986. Data based on MPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FIN FISH													
Black drum	37,843	31,840	49,004	40,415	7,938	14,272	19,420	6,333	10,617	21,838	24,205	29,795	293,320
Florida pompano	0	0	3	0	9	2	14	0	271	1,166	608	7	2,080
Flounder, unclassified	1,383	907	814	1,182	1,464	2,743	2,240	660	350	1,434	4,920	6,521	24,618
Sheepshead	4,595	4,418	5,017	579	457	116	217	846	986	1,354	3,294	5,504	27,383
Total finfish	43,821	36,965	54,838	42,176	9,868	17,133	21,891	7,839	12,224	25,792	33,027	41,827	347,401
SHELLFISH													
Shrimp (heads on)													
Brown and pink	1,249	1,874	22,981	31,232	0	21,698	1,199	0	0	0	462	280	80,975
White	0	0	0	0	0	0	0	0	0	0	51	120	171
Total shrimp	1,249	1,874	22,981	31,232	0	21,698	1,199	0	0	0	513	400	81,146
Blue crab	19,604	2,682	11,394	24,445	0	0	0	0	0	18,161	0	0	76,286
Squid, unclassified	0	0	310	0	0	0	0	0	0	0	0	0	310
Total shellfish	20,853	4,556	34,685	55,677	0	21,698	1,199	0	0	18,161	513	400	157,742
Grand Total	64,674	41,521	89,523	97,853	9,868	38,831	23,090	7,839	12,224	43,953	33,540	42,227	505,143

Table D.16. Ex-vessel value (\$) of each species landed commercially from the upper Laguna Madre system during 1986. Data based on NMFS and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	22,467	23,140	25,859	21,674	6,629	13,443	18,637	5,966	10,683	19,764	22,414	27,573	218,249
Florida pompano	0	0	3	0	9	2	13	0	257	1,108	578	7	1,977
Flounder, unclassified	1,424	955	911	1,346	1,406	2,608	2,131	733	345	1,362	4,671	6,196	24,088
Sheepshead	934	886	1,313	98	162	41	81	340	345	476	1,152	1,922	7,750
Total finfish	24,825	24,981	28,086	23,118	8,206	16,094	20,862	7,039	11,630	22,710	28,815	35,698	252,064
SHELLFISH													
Shrimp (heads on)													
Brown and pink	2,061	2,814	40,582	34,980	0	13,670	839	0	0	0	485	336	95,767
White	0	0	0	0	0	0	0	0	0	0	54	144	198
Total Shrimp	2,061	2,814	40,582	34,980	0	13,670	839	0	0	0	539	480	95,965
Blue crab	5,905	886	4,207	8,556	0	0	0	0	0	6,720	0	0	26,274
Squid, unclassified	0	0	155	0	0	0	0	0	0	0	0	0	155
Total shellfish	7,966	3,700	44,944	43,536	0	13,670	839	0	0	6,720	539	480	122,394
Grand Total	32,791	28,681	73,030	66,654	8,206	29,764	21,701	7,039	11,630	29,430	29,354	36,178	374,458

Table D.17. Weight (lb) of each species landed commercially from the lower Laguna Madre system during 1986. Data based on MPPR and NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FISH													
Black drum	21,411	18,282	4,012	2,411	2,541	3,009	1,326	2,672	8,091	10,486	35,627	120,296	
Florida pompano	3	539	0	11	0	0	0	5,551	0	0	0	0	
Flounder, unclassified	1,160	1,284	4,797	3,369	5,346	12,066	10,220	2,138	10,235	11,135	10,623	6,313	
Kingfish, unclassified	0	0	340	0	0	0	0	0	0	12	207	55	
Mullet, unclassified	0	0	0	39	0	0	0	0	0	0	0	0	
Sheepshead	673	1,189	55	0	25	126	0	0	69	151	193	151	
Unclassified food	407	0	0	0	4,128	0	0	0	0	0	0	0	
Total finfish	23,654	21,294	9,204	5,830	12,040	15,201	11,546	10,361	18,407	21,921	21,357	42,091	212,906
SHELLFISH													
Blue crab	28,956	0	9,731	31,975	17,818	22,729	15,479	54,012	28,553	9,809	0	10,692	229,754
Oyster, Eastern	0	0	0	0	0	0	0	0	0	0	0	0	123
Total shellfish	28,956	0	9,731	31,975	17,818	22,729	15,479	54,012	28,553	9,809	0	10,815	229,877
Grand Total	52,610	21,294	18,935	37,805	29,858	37,930	27,025	64,373	46,960	31,730	21,357	52,906	442,783

Table D.18. Ex-vessel value (\$) of each species landed commercially from the lower Laguna Madre system during 1986. Data based on NMFS and NMFR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
													Months
FIN FISH													
Black drum	16,770	15,559	3,513	2,427	2,394	2,846	1,151	2,538	7,504	7,694	7,044	16,003	85,443
Florida pompano	1	647	0	14	0	0	0	6,384	0	0	0	0	7,046
Flounder, unclassified	1,220	1,372	4,667	4,410	6,949	13,400	10,906	2,031	9,723	10,022	8,782	4,252	77,734
Kingfish, unclassified	0	0	170	0	0	0	0	0	12	52	45	0	279
Mullet, unclassified	0	0	0	0	10	0	0	0	0	0	0	0	10
Sheepshead	178	345	17	0	6	36	0	0	10	23	39	30	684
Unclassified food	183	0	0	0	3,922	0	0	0	0	0	0	0	4,105
Total fin fish	18,352	17,923	8,367	6,861	13,271	16,282	12,057	10,953	17,249	17,791	15,910	20,285	175,301
SHELLFISH													
Blue crab	8,687	0	2,627	10,711	5,345	6,819	4,644	16,481	7,424	2,943	0	2,994	68,675
Oyster, Eastern	0	0	0	0	0	0	0	0	0	0	0	0	231
Total shellfish	8,687	0	2,627	10,711	5,345	6,819	4,644	16,481	7,424	2,943	0	3,225	68,906
Grand Total	27,039	17,923	10,994	17,572	18,616	23,101	16,701	27,434	24,673	20,734	15,910	23,510	244,207

Appendix E. Monthly commercial finfish and shellfish landings (lb) and ex-vessel value (\$) from the Gulf of Mexico grid zones during 1986.

Table E.1. Weight (lb) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 17.0 during 1986. Data based on MMPR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	114	145	0	565	0	0	81	0	510	0	158	162	1,735
Bluefish	0	0	0	0	0	0	516	0	0	0	0	0	516
Cobia	96	0	0	0	0	0	58	0	80	0	0	45	58
Do Iphin	0	0	0	0	0	24	0	0	0	0	12	17	53
Florida pompano	0	0	0	0	189	0	0	57	0	0	0	0	246
Flounder, unclassified	918	564	324	1,063	199	361	129	46	230	1,048	5,999	4,254	15,135
Gafftopsail catfish	585	0	189	0	15	8	20	0	15	0	0	0	832
Greater amberjack	1,531	122	648	196	781	1,705	518	245	781	640	92	53	7,312
Grouper, black	0	0	0	119	0	0	0	0	0	0	0	0	119
Grouper, scamp	0	0	0	47	9	219	2	728	252	58	56	112	1,483
Grouper, unclassified	4,643	2,993	2,957	0	1,521	0	0	457	70	22	22	0	12,685
Grouper, warsaw	0	0	0	117	0	517	54	493	104	191	31	47	1,554
Grouper, yellowedge	0	0	0	3,137	0	2,890	78	1,852	1,511	1,197	27	40	10,732
Kingfish, unclassified	63	500	237	406	350	157	65	0	35	59	0	25	1,897
Seatrout, sand	0	0	0	0	0	0	0	0	0	0	56	241	297
Shark, shortfin mako	0	0	57	0	0	0	0	0	0	0	0	0	57
Shark, unclassified	233	4,312	215	81	122	0	64	0	0	0	0	0	5,027
Sheepshead	50	455	0	565	115	33	356	0	118	27	752	250	2,721
Snapper, red	10,546	13,335	10,452	5,578	6,479	8,099	14,028	16,876	4,748	7,874	838	4,612	103,465
Snapper, unclassified	199	1,082	787	0	0	0	0	0	25	59	0	0	2,152
Swordfish	0	0	0	296	0	0	0	704	183	397	119	94	1,793
Tilefish	629	270	493	307	0	1,453	0	0	0	0	110	0	110
Tuna, blackfin	0	0	0	0	0	132	0	0	0	0	0	0	132
Tuna, yellowfin	0	0	0	0	0	0	0	0	0	0	0	0	3,753
Unclassified food	0	0	0	16	0	70	0	0	0	160	0	30	276
Unclassified scrap	0	0	0	175	125	0	0	150	320	0	100	870	870
Total finfish	19,607	23,778	16,359	12,493	9,955	15,851	15,911	21,621	8,732	12,391	12,075	10,078	178,851
SHELLFISH													
Blue crab	1,000	1,209	4,222	5,850	3,572	1,890	1,991	2,713	4,476	0	2,908	79	29,910
Squid, unclassified	0	0	343	80	0	174	69	134	246	3,017	656	748	5,467
Total Shellfish	1,000	1,209	4,565	5,930	3,572	2,064	2,060	2,847	4,722	3,017	3,564	827	35,377
Grand total	20,607	24,987	20,924	18,423	13,527	17,915	17,971	24,468	13,454	15,408	15,639	10,905	214,228

Table E.2. Ex-vessel value (\$) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 17.0 during 1986. Data based on HMPR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	29	26	0	226	0	0	83	0	587	0	119	90	1,160
Bluefish	0	0	0	0	0	0	155	0	0	0	0	0	155
Cobia	48	0	0	0	0	49	0	67	0	0	28	42	234
Dolphin	0	0	0	0	0	20	0	0	0	13	15	0	48
Florida pompano	0	0	0	0	142	0	0	80	0	0	0	0	222
Flounder, unclassified	702	443	289	915	148	277	140	46	259	1,013	4,937	2,960	12,129
Gafftopsail catfish	146	0	123	0	5	2	5	0	3	0	0	0	284
Greater amberjack	536	41	220	88	273	682	285	125	328	282	45	27	2,932
Groupers, black	0	0	0	184	0	0	0	0	0	0	0	0	184
Groupers, scamp	0	0	0	73	10	263	3	976	340	82	79	152	1,978
Groupers, unclassified	6,500	4,693	4,218	0	2,094	0	0	469	60	19	19	0	18,072
Groupers, warsaw	0	0	0	99	0	5,022	0	3,468	46	360	88	162	40
Groupers, yellowedge	0	0	0	0	0	0	0	0	0	0	0	0	1,183
Kingfish, unclassified	22	161	59	116	90	47	18	0	9	12	0	6	15,037
Seatrout, sand	0	0	0	0	0	0	0	0	0	0	20	96	116
Shark, shortfin mako	0	0	57	0	0	0	0	0	0	0	0	0	57
Shark, unclassified	82	1,466	86	32	49	0	24	0	0	0	0	0	1,739
Sheepshead	15	114	0	226	25	10	120	0	33	5	233	80	861
Snapper, red	18,857	29,163	21,178	11,583	13,313	16,154	27,533	31,394	9,213	15,704	1,617	8,434	204,143
Snapper, unclassified	259	2,055	1,094	0	0	0	0	0	19	69	0	0	3,496
Snapper, vermillion	0	0	0	429	0	0	0	788	137	401	131	108	1,994
Swordfish	0	0	0	0	0	0	0	0	0	0	310	0	310
Tilefish	660	284	562	338	0	1,090	0	95	0	376	0	0	3,405
Tuna, blackfin	0	0	0	0	0	48	0	0	0	0	0	0	48
Tuna, yellowfin	0	0	0	0	0	0	0	0	0	0	0	0	6,005
Unclassified food	0	0	0	6	0	60	0	0	0	96	0	25	187
Unclassified scrap	0	0	0	0	26	19	0	0	23	100	0	15	183
Total finfish	27,856	38,446	27,886	19,337	16,175	22,551	28,509	36,900	13,139	20,153	13,621	12,129	276,702
SHELLFISH													
Blue crab	250	484	1,938	2,890	2,620	2,385	748	1,085	1,790	0	1,162	24	15,376
Squid, unclassified	0	0	172	40	0	96	52	76	141	1,793	355	411	3,136
Total shellfish	250	484	2,100	2,930	2,620	2,481	800	1,161	1,931	1,793	1,517	435	18,512
Grand total	28,106	38,930	29,996	22,267	18,795	25,032	29,309	38,061	15,070	21,946	15,138	12,564	295,214

Table E.3. Weight (lb) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 18.0 during 1986. Data based on MPR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic croaker	192	0	7	0	10	20	112	682	379	805	0	0	2,207
Atlantic moonfish	0	0	0	0	0	2	0	0	0	0	0	0	2
Atlantic spadefish	0	0	0	0	56	0	0	0	0	0	0	0	56
Black drum	402	161	182	174	31	19	0	0	0	300	863	0	2,132
Bluefish	0	0	0	0	0	99	0	0	354	71	53	178	755
Cobia	0	0	0	129	296	1,474	2,045	667	367	359	318	605	6,260
Codfishes, unclassified	0	0	0	0	0	0	0	0	0	0	487	0	487
Dolphin	0	0	0	0	426	0	97	197	27	99	46	89	981
Florida pompano	0	0	0	412	0	132	22	0	56	0	0	0	622
Flounder, unclassified	2,058	588	765	719	788	399	798	1,645	1,060	2,308	4,972	3,508	19,608
Gafftopsail catfish	35	0	0	3,117	527	291	74	0	0	0	0	0	4,044
Greater amberjack	0	0	0	858	0	353	1,922	29	354	1,332	951	2,044	7,843
Grouper, scamp	0	0	0	0	0	0	0	0	0	44	90	0	134
Grouper, unclassified	0	5,658	2,389	3,417	2,386	475	675	1,019	788	1,034	1,715	8,755	28,311
Grouper, warsaw	0	0	0	0	0	140	0	0	0	0	254	1,236	1,630
Gulf butterfish	0	0	0	0	0	0	80	10	0	0	0	0	90
Kingfish, unclassified	1,002	549	596	443	12	79	1,161	981	209	1,963	1,375	824	9,214
Mackerel, king	0	0	0	0	0	0	27	96	484	381	57	261	1,306
Mullet, unclassified	0	392	0	0	92	60	0	6	0	127	615	2,329	3,621
Seatrat, sand	245	0	0	0	0	0	0	0	0	72	0	0	317
Shark, blacktip	0	0	671	0	0	0	0	0	0	0	0	0	671
Shark, shortfin mako	0	166	1,203	0	363	0	0	0	0	0	0	915	2,647
Shark, unclassified	0	0	0	1,872	0	719	1,218	25	137	1,271	0	0	5,242
Sheepshead	1,886	318	178	508	5	7	540	592	626	1,202	869	302	7,013
Snapper, red	11,085	20,385	23,980	25,935	21,512	21,311	16,668	13,671	23,394	19,940	43,540	28,140	269,561
Snapper, unclassified	0	492	125	5,822	1,912	0	6,244	7,861	13	6,718	5,827	2,280	37,294
Snapper, vermilion	0	0	0	0	0	0	0	0	0	4,527	1,774	0	6,301
Swordfish	0	1,404	6,986	710	816	522	0	1,111	0	0	0	10,307	21,856
Tilefish	0	0	0	0	0	0	0	0	22	0	0	48	70
Triggerfish, gray	0	0	0	227	0	0	0	0	0	0	25	0	252
Tuna, blackfin	0	0	0	0	0	0	0	0	0	0	195	0	195
Tuna, unclassified	0	0	5,478	7,607	28,847	31,666	97	0	0	0	0	1,781	75,476
Tuna, yellowfin	0	0	0	0	0	0	822	0	0	0	0	414	1,236
Unclassified food	63	0	0	509	0	0	416	0	231	599	234	0	2,052
Unclassified scrap	0	0	0	0	127	1,026	0	0	160	176	0	0	1,489
Total finfish	16,948	30,113	42,560	52,459	58,206	58,792	32,118	29,484	28,571	43,543	64,065	64,016	520,975
SHELLFISH													
Blue crab	1,737	687	394	3,164	4,701	7,465	5,606	1,118	452	5,662	9,601	0	40,587
Squid, unclassified	1,48	810	0	1,050	517	262	40	27	0	349	301	52	3,556
Total Shellfish	1,885	1,497	394	4,214	5,218	7,727	5,646	1,145	452	6,011	9,902	52	44,143
Grand total	18,833	31,610	42,954	56,673	63,424	66,519	37,764	30,629	29,123	49,554	73,967	64,068	565,118

Table E.4. Ex-vessel value (\$) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 18.0 during 1986. Data based on MPR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic croaker	130	0	1	0	4	7	33	205	95	201	0	0	676
Atlantic moonfish	0	0	0	0	0	0	1	0	0	0	0	0	1
Atlantic spadefish	0	0	0	0	25	0	0	0	0	0	0	0	25
Black drum	273	61	82	43	20	18	0	0	0	345	302	0	1,144
Bluefish	0	0	0	0	0	0	93	0	0	142	64	48	489
Cobia	0	0	0	83	234	1,063	1,126	400	266	222	215	566	4,175
Cod fishes, unclassified	0	0	0	0	0	0	0	0	0	0	0	0	170
Boarfish	0	0	0	0	405	0	90	187	26	69	23	72	872
Florida pompano	0	0	0	577	0	106	21	0	67	0	0	0	771
Flounder, unclassified	1,640	512	546	564	613	367	644	1,327	860	1,709	3,853	2,530	15,165
Gafftopsail catfish	21	0	0	989	169	102	63	0	0	0	0	0	0
Greater amberjack	0	0	0	382	0	159	1,344	22	247	944	653	1,226	4,977
Grouper, scamp	0	0	0	0	0	0	0	0	0	62	135	0	197
Grouper, unclassified	0	9,977	3,732	4,004	3,014	454	700	1,136	993	987	1,910	10,417	37,324
Groupers, warshaw	0	0	0	0	0	84	0	0	0	0	254	1,031	1,369
Gulf butterfish	0	0	0	0	0	0	0	0	32	3	0	0	35
Kingfish, unclassified	389	267	223	121	3	20	309	321	52	522	430	237	2,894
Mackerel, king	0	0	0	0	0	0	0	20	72	363	286	43	980
Mullet, unclassified	0	78	0	0	0	18	15	0	1	0	19	92	349
SeatROUT, sand	135	0	0	0	0	0	0	0	0	0	14	0	149
Shark, blacktip	0	0	302	0	0	0	0	0	0	0	0	0	302
Shark, shortfin mako	0	282	842	0	417	0	0	0	0	0	0	0	275
Shark, unclassified	0	0	0	1,591	0	366	367	10	55	506	0	0	1,816
Sheepshead	559	97	36	138	2	2	162	207	157	303	304	76	2,043
Snapper, red	18,210	37,496	46,547	50,300	42,623	39,791	29,319	24,184	43,018	31,132	76,520	53,573	492,713
Snapper, unclassified	0	959	244	10,051	2,516	0	8,950	14,543	12	12,559	9,470	4,010	63,314
Snapper, vermilion	0	0	0	0	0	0	0	0	0	5,983	2,662	0	8,545
Swordfish	0	4,844	24,102	2,222	2,946	1,984	0	3,833	0	0	0	0	38,136
Tilefish	0	0	0	0	0	0	0	0	15	0	0	48	63
Triggerfish, gray	0	0	0	98	0	0	0	0	0	0	19	0	117
Tuna, blackfin	0	0	0	0	0	0	0	0	0	59	0	0	59
Tuna, unclassified	0	0	12,326	18,181	37,213	26,916	25	0	0	0	0	0	1,514
Tuna, yellowfin	0	22	0	0	0	0	0	0	781	0	0	0	1,588
Unclassified food	0	0	0	148	0	0	111	0	139	180	73	0	673
Unclassified scrap	0	54,573	88,983	89,492	90,241	71,820	43,285	47,261	46,534	56,092	97,176	115,205	342
Total finfish	21,379												822,041
SHELLFISH													
Blue crab	615	172	99	1,094	1,675	2,122	1,408	283	113	2,347	2,880	0	12,808
Squid, unclassified	59	341	0	521	272	131	12	14	0	70	201	10	1,631
Total Shellfish	674	513	99	1,615	1,947	2,253	1,420	297	113	2,417	3,081	10	14,439
Grand total	22,053			55,086	89,082	91,107	92,188	74,073	44,705	47,558	58,509	100,257	115,215
													836,480

Table E.5. Weight (lb) of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 19.0 during 1986. Data based on NMFS.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic spadefish	0	0	0	0	0	40	12	0	0	0	0	0	52
Black drum	199	60	166	299	98	71	0	0	0	0	0	0	893
Bluefish	0	0	0	0	0	0	52	0	0	0	0	0	52
Cobia	0	0	0	50	42	196	296	171	336	0	172	0	1,263
Dolphin	0	0	0	0	0	179	0	96	0	0	0	0	275
Florida pompano	0	127	0	0	7	0	0	0	0	0	0	0	134
Flounder, unclassified	0	108	53	302	279	528	1,612	374	342	129	386	262	4,375
Gaff topsail catfish	0	0	0	0	40	0	0	0	0	0	0	0	40
Greater amberjack	351	0	635	122	1,167	3,088	2,267	21	109	0	3	674	8,427
Grouper, scamp	0	0	71	0	0	0	0	0	0	0	0	0	71
Grouper, unclassified	14,294	1,625	4,524	1,165	8,701	2,808	2,176	201	307	380	133	26	36,340
Grouper, warsaw	0	0	920	0	1,259	2,360	21	0	0	0	0	0	4,560
Kingfish, unclassified	139	24	0	0	148	0	0	72	0	0	151	0	534
Shark, shortfin mako	0	0	1,511	1,443	0	0	0	0	0	0	0	0	2,954
Shark, unclassified	17,146	2,192	632	1,221	2,485	1,617	508	31	200	0	356	0	26,388
Sheepshead	0	0	0	118	0	0	0	0	0	0	0	0	118
Snapper, red	14,655	3,021	14,580	5,152	1,667	11,485	12,636	603	2,198	974	2,598	2,306	71,875
Snapper, unclassified	0	0	898	196	1,976	71	0	406	4,461	0	0	182	8,190
Swordfish	32,832	18,088	8,183	839	0	0	0	0	0	0	0	0	59,942
Tilefish	0	0	0	0	2,456	0	0	0	0	0	0	0	2,456
Tuna, bluefin	0	0	1,123	0	0	0	0	0	0	0	0	0	1,123
Tuna, unclassified	2,827	0	0	201	193	0	0	0	0	0	274	0	3,495
Tuna, yellowfin	0	227	3,817	12,175	0	0	0	0	0	0	0	0	16,219
Unclassified food	0	0	14	0	295	0	47	0	0	0	0	0	356
Unclassified scarp	0	0	0	0	0	0	230	0	0	0	0	0	230
Total finfish	82,443	25,472	37,127	23,283	20,992	22,264	19,943	1,879	7,953	1,757	3,799	3,450	250,362
SHELLFISH													
Blue crab	1,000	0	5,000	0	0	0	0	0	0	0	0	0	6,000
Squid, unclassified	493	0	40	0	1,726	100	0	24	0	0	0	433	2,816
Total Shellfish	1,493	0	5,040	0	1,726	100	0	24	0	0	0	433	8,816
Grand total	83,936	25,472	42,167	23,283	22,718	22,364	19,943	1,903	7,953	1,757	3,799	3,450	259,178

Table E. 6. Ex-vessel (\$ value of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 19.0 during 1986. Data based on MPR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic spadefish	0	0	0	0	0	0	0	0	0	0	0	0	22
Black drum	105	21	50	105	69	75	0	0	0	0	0	0	425
Bluefish	0	0	0	0	0	0	26	0	0	0	0	0	26
Cobia	0	0	0	30	40	140	138	72	293	0	95	0	908
Dolphin	0	0	0	0	143	0	72	0	0	0	0	0	215
Florida pompano	0	127	0	0	9	0	0	0	0	0	0	0	136
Flounder, unclassified	0	81	53	232	179	332	1,889	210	132	90	315	205	3,718
Gafftopsail catfish	0	0	0	0	0	12	0	0	0	0	0	0	12
Greater amberjack	172	0	701	105	640	772	689	12	65	0	2	404	3,562
Grouper, scamp	0	0	99	0	0	0	0	0	0	0	0	0	99
Grouper, unclassified	10,081	2,068	4,104	11,102	9,110	2,771	1,229	103	240	488	150	28	31,474
Grouper, warsaw	0	0	598	0	814	1,534	13	0	0	0	0	0	2,959
Kingfish, unclassified	60	14	0	0	109	0	0	15	0	0	8	0	206
Shark, shortfin mako	0	0	2,085	1,197	0	0	0	0	0	0	0	0	3,282
Shark, unclassified	10,317	1,733	258	406	1,061	649	238	13	184	0	146	0	15,005
Sheepshead	0	0	0	41	0	0	0	0	0	0	0	0	41
Snapper, red	27,807	4,788	28,319	10,697	3,088	19,023	17,567	1,068	3,397	1,474	3,414	3,156	123,798
Snapper, unclassified	0	0	765	286	3,754	85	0	345	8,253	0	0	0	309
Swordfish	106,064	36,318	17,607	2,349	0	0	0	0	0	0	0	0	162,338
Tilefish	0	0	0	0	1,719	0	0	0	0	0	0	0	1,719
Tuna, bluefin	0	0	4,047	0	0	0	0	0	0	0	0	0	4,047
Tuna, unclassified	6,041	0	0	197	135	0	0	0	0	0	0	0	6,620
Tuna, yellowfin	0	409	6,871	17,045	0	0	0	0	0	0	0	0	24,325
Unclassified food	0	0	8	0	64	0	27	0	0	0	0	0	99
Unclassified scrap	0	0	0	0	0	25	0	0	0	0	0	0	25
Total finfish	160,647	45,559	65,565	33,792	20,946	25,397	21,919	1,838	12,564	2,299	4,130	4,102	398,758
SHELLFISH													
Blue crab	300	0	1,750	0	0	0	0	0	0	0	0	0	2,050
Squid, unclassified	148	0	12	0	432	25	0	18	0	0	0	135	770
Total Shellfish	448	0	1,762	0	432	25	0	18	0	0	0	135	2,820
Grand total	161,095	45,559	67,327	33,792	21,378	25,422	21,919	1,836	12,564	2,299	4,130	4,237	401,578

Table E.7. Weight (lb) value of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 20.0 during 1986. Data based on MPRR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	0	67	0	0	0	0	1,647	0	977	0	1,090	4,037	7,818
Cobia	0	65	0	0	184	33	911	1,463	454	186	0	9	3,305
Codfishes, unclassified	0	0	0	0	0	0	0	0	0	0	7	0	7
Dolphin	0	0	0	0	540	94	75	0	724	0	5	0	1,438
Florida pompano	0	0	0	0	308	0	0	0	0	0	21	0	329
Flounder, unclassified	41	713	215	0	174	0	2,219	3,665	1,726	0	3,653	8,916	21,322
Gafftopsail catfish	0	0	0	215	0	0	0	1,538	892	0	231	462	3,338
Greater amberjack	841	7,464	4	2,792	6,341	3,144	16,299	19,772	4	93	743	2,231	59,728
Grouper, jewfish	0	0	38	0	0	0	0	0	0	0	0	0	38
Grouper, scamp	0	48	0	0	0	0	26	0	0	0	87	15	176
Grouper, unclassified	1,261	13,713	861	2,658	2,498	2,421	16,486	21,484	5,642	2,242	901	838	71,005
Grouper, warsaw	0	0	1,180	1,763	0	554	1,196	7,918	3,536	1,475	279	724	18,525
Kingfish, unclassified	0	0	0	0	0	0	0	112	141	0	0	0	253
Hakebel, king	0	0	0	0	0	0	150	0	0	0	0	0	150
Mackerel, Spanish	0	0	0	0	0	0	7	0	0	0	0	0	7
Shark, shortfin mako	0	0	60	480	653	0	0	0	0	0	0	0	1,193
Shark, unclassified	716	1,351	294	9,750	3,220	1,397	9,102	6,876	174	486	232	186	33,784
Sheepshead	0	0	659	1,821	0	0	1,724	818	566	0	700	1,529	7,817
Snapper, red	17,502	24,595	13,584	12,275	14,894	23,524	22,056	28,634	18,395	3,679	9,540	18,050	206,728
Snapper, unclassified	0	20	1,325	21	3,298	0	0	117	63	3,416	2,142	0	10,402
Snapper, vermillion	0	0	0	28	0	0	1,542	538	0	0	564	579	0
Swordfish	246	0	0	0	0	0	0	0	0	0	0	0	2,354
Tilefish	0	7	0	0	0	0	0	0	0	1,199	0	0	1,206
Tuna, unclassified	0	0	0	0	0	0	0	0	29	0	0	0	29
Tuna, yellowfin	0	0	0	0	25,346	42,524	0	0	0	0	1,286	0	69,156
Unclassified food	0	5	5	0	40	0	21	0	0	0	0	0	71
Wahoo	0	0	0	0	126	0	0	0	0	0	0	0	126
Total finfish	20,607	48,048	18,253	31,775	59,164	74,236	71,912	92,426	34,493	13,427	20,210	36,997	521,548
SHELLFISH													
Squid, unclassified	0	300	117	279	0	0	530	233	250	0	100	380	2,189
Stone crab	0	0	0	0	0	0	17	0	0	0	0	0	17
Total Shellfish	0	300	117	279	0	0	547	233	250	0	100	380	2,206
Grand total	20,607	48,348	18,370	32,054	59,164	74,236	72,459	92,659	34,743	13,427	20,310	37,377	523,754

Table E.8. Ex-vessel (\$) value of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 20.0 during 1986. Data based on MAFR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Black drum	0	50	0	0	0	0	0	1,268	0	635	0	763	2,285
Cobia	0	49	0	0	0	202	23	541	1,043	349	130	0	13
Codfishes, unclassified	0	0	0	0	0	0	0	0	0	0	0	10	2,350
Dolphin	0	0	0	0	0	449	136	106	0	1,050	0	7	1,748
Florida pompano	0	0	0	0	0	354	0	0	0	0	0	18	312
Flounder, unclassified	38	524	151	0	135	0	2,222	2,714	1,262	0	2,931	8,391	18,368
Gafftopsail catfish	0	0	0	151	0	0	0	0	231	491	0	69	92
Greater amberjack	538	2,836	3	755	2,158	2,182	11,537	13,810	3	70	526	1,567	35,985
Grouper, jewfish	0	0	48	0	0	0	0	0	0	0	0	0	48
Grouper, scamp	0	57	0	0	0	0	0	25	0	0	0	118	22
Grouper, unclassified	2,522	9,051	799	2,826	2,850	3,229	13,310	15,198	4,450	1,893	944	1,131	58,203
Groupers, warsaw	0	0	767	1,163	0	388	837	4,835	2,666	1,195	195	502	12,548
Kingfish, unclassified	0	0	0	0	0	0	0	0	67	24	0	0	91
Mackerel, king	0	0	0	0	0	0	0	140	0	0	0	0	140
Mackerel, Spanish	0	0	0	0	0	0	7	0	0	0	0	0	7
Shark, shortfin mako	0	51	398	740	0	0	0	0	0	0	0	0	1,189
Shark, unclassified	471	1,077	118	6,746	2,228	978	5,167	4,551	42	204	46	136	21,764
Sheepshead	0	0	198	546	0	0	655	368	311	0	140	306	2,524
Snapper, red	42,463	53,434	32,809	21,457	27,781	46,664	41,850	56,360	36,547	7,635	18,692	34,919	420,611
Snapper, unclassified	0	17	1,126	18	3,628	0	0	199	86	7,123	4,026	0	16,223
Snapper, vermillion	0	0	0	0	0	0	0	0	0	654	614	0	1,268
Swordfish	590	0	73	0	4,518	1,506	0	0	0	0	0	0	6,687
Tilefish	0	6	0	0	0	0	0	0	875	0	0	0	881
Tuna, unclassified	0	0	0	0	0	0	0	49	0	0	0	0	49
Tuna, yellowfin	0	0	0	0	17,849	29,834	0	0	0	322	0	0	48,005
Unclassified food	0	5	4	0	12	0	31	0	0	0	0	0	52
Wahoo	0	0	0	0	107	0	0	0	0	0	0	0	107
Total finfish	46,622	67,106	36,147	34,060	63,011	84,947	77,689	99,425	48,791	19,226	29,099	49,364	655,487
SHELLFISH													
Squid, unclassified	0	150	38	79	0	0	195	117	125	0	50	190	944
Stone crab	0	0	0	0	0	0	19	0	0	0	0	0	19
Total Shellfish	0	150	38	79	0	0	214	117	125	0	50	190	963
Grand total	46,622	67,256	36,185	34,139	63,011	84,947	77,903	99,542	48,916	19,226	29,149	49,554	656,450

Table E.9. Weight (lb) value of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 21.0 during 1986. Data based on MAFR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic croaker	331	0	0	0	0	0	0	0	0	0	0	0	331
Black drum	975	501	606	24	400	0	0	0	0	0	0	0	3,007
Cobia	0	0	0	0	33	0	98	0	0	22	0	0	153
Dolphin	0	0	0	0	0	0	0	0	0	190	3	0	193
Florida pompano	411	0	0	0	0	0	0	1	0	0	2	0	414
Flounder, unclassified	658	727	160	1,527	1,613	154	284	446	242	173	177	456	6,617
Gafftopsail catfish	0	1,049	0	0	745	83	0	0	0	0	0	0	4,089
Greater amberjack	1,050	3,127	315	1,969	2,981	1,167	1,198	2,025	688	1,863	2,212	3,826	22,794
Groupers, scamp	0	0	644	0	551	0	216	85	358	176	721	2,751	
Groupers, unclassified	1,506	2,634	1,158	6,782	3,400	530	1,619	0	761	642	18	886	19,936
Grouper, warsaw	0	0	0	2,150	0	1,140	0	1,193	783	2,549	3,484	836	12,135
Grouper, yellowfin	0	0	0	364	0	0	0	751	0	0	761	0	1,876
Kingfish, unclassified	346	715	0	462	0	701	262	276	0	0	0	227	2,989
Mackerel, Spanish	0	0	0	0	0	209	0	0	0	0	0	0	209
Mullet, unclassified	0	0	0	0	0	0	0	0	0	0	125	82	207
Shark, unclassified	2,248	2,612	37	665	11,928	5,817	2,281	721	327	853	1,619	5,742	34,950
Sheepshead	0	0	0	0	0	0	125	333	205	45	38	126	900
Snapper, red	31,986	29,268	12,516	21,094	7,576	9,917	8,921	8,432	3,366	25,403	13,145	13,197	184,821
Snapper, unclassified	281	1,004	914	1,048	247	2,544	434	836	631	1,034	1,701	1,748	12,322
Swordfish	0	1,144	0	63	0	0	0	0	0	0	0	0	1,207
Tuna, yellowfin	0	0	0	960	0	0	0	0	0	0	0	0	9,251
Unclassified food	2	0	0	944	0	0	0	0	0	74	0	0	1,020
Total finfish	39,804	42,781	15,601	39,278	28,542	23,246	15,124	15,328	7,278	33,019	26,033	37,098	323,132
SHELLFISH													
Blue crab	0	0	0	0	0	0	0	0	0	2,502	3,280	574	6,356
Squid, unclassified	50	0	0	0	364	116	0	123	0	0	22	28	703
Total Shellfish	50	0	0	0	364	116	0	123	0	2,502	3,302	602	7,059
Grand total	39,854	42,781	15,601	39,278	28,906	23,362	15,124	15,451	7,278	35,521	29,335	37,700	330,191

Table E.10. Ex-vessel (\$) value of each species, except shrimp, landed commercially from Gulf of Mexico grid zone 21.0 during 1986. Data based on MAPR.

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total
FINFISH													
Atlantic croaker	83	0	0	0	0	0	0	0	0	0	0	0	83
Black drum	195	175	175	467	23	100	0	0	0	0	0	0	1,135
Cobia	0	0	0	0	31	0	93	0	10	0	0	0	134
Dolphin	0	0	0	0	0	0	0	0	143	1	0	0	144
Florida pompano	925	0	0	0	0	0	0	2	0	0	3	0	930
Flounder, unclassified	525	490	91	1,348	1,533	107	236	372	186	138	80	249	5,355
Gafftopsail catfish	0	734	0	522	66	0	0	0	0	1,548	0	2,870	
Greater amberjack	669	1,499	110	1,027	1,460	561	619	1,146	344	1,067	1,159	1,479	11,140
Grouper, scamp	0	0	0	934	0	657	0	216	85	358	167	685	3,102
Grouper, unclassified	1,419	2,534	976	10,405	4,030	526	1,355	0	799	867	26	880	23,817
Grouper, warsaw	0	0	0	1,623	0	798	0	544	401	1,337	1,575	376	6,654
Grouper, yellowfin	0	0	0	528	0	0	0	713	0	0	723	0	1,964
Kingfish, unclassified	165	358	0	231	0	351	113	112	0	0	0	0	114
Mackerel, Spanish	0	0	0	0	0	199	0	0	0	0	0	0	199
Mullet, unclassified	0	0	0	0	0	0	0	0	0	0	94	221	315
Shark, unclassified	989	1,724	7	451	5,632	2,005	963	437	80	246	435	1,752	14,721
Sheepshead	0	0	0	0	8	0	21	50	31	7	6	19	142
Snapper, red	63,037	58,852	24,135	40,414	14,750	18,789	14,125	14,886	5,275	49,178	21,623	20,161	345,225
Snapper, unclassified	337	1,205	910	1,310	296	3,053	386	836	631	1,035	1,599	1,661	13,259
Swordfish	0	3,718	0	202	0	0	0	0	0	0	0	0	3,920
Tuna, yellowfin	0	0	0	2,592	0	0	0	0	0	0	0	0	20,631
Unclassified food	3	0	0	944	0	0	0	0	0	37	0	0	984
Total finfish	68,347	71,289	26,404	62,476	28,254	27,243	17,818	19,407	7,975	54,281	29,038	45,636	458,168
SHELLFISH													
Blue crab	0	0	0	0	0	0	0	0	0	851	1,115	195	2,161
Squid, unclassified	25	0	0	0	77	58	0	62	0	0	11	14	247
Total Shellfish	25	0	0	0	77	58	0	62	0	851	1,126	209	2,408
Grand total	68,372	71,289	26,404	62,476	28,331	27,301	17,818	19,469	7,975	55,132	30,164	45,845	460,576

Table E.11. Weight (1b) of each shrimp species (heads-on) landed commercially from the Gulf of Mexico during 1986. Data based on NMFS.

Month	Brown and Pink	White	Other	Total
January	2,702,960	437,594	117,849	3,258,403
February	2,845,300	578,319	35,280	3,458,899
March	1,872,094	695,567	18,559	2,586,220
April	1,623,271	782,894	4,034	2,410,199
May	2,113,735	869,029	193	2,982,957
June	5,579,277	1,056,482	23	6,635,782
July	11,509,532	744,239	23	12,253,794
August	9,930,530	2,007,551	2,910	11,940,991
September	6,952,376	3,034,298	0	9,986,674
October	4,205,976	3,339,764	121,066	7,666,806
November	4,433,106	2,331,478	338,218	7,102,802
December	4,458,441	707,000	1,103,574	6,269,015
Total	58,226,598	16,584,215	1,741,729	76,552,542

Table E.12. Ex-vessel value (\$) of each shrimp species (heads-on) landed commercially from the Gulf of Mexico during 1986. Data based on NMFS.

Month	Brown and Pink	White	Other	Total
January	7,254,079	892,695	31,693	8,178,467
February	7,949,727	1,119,582	12,582	9,081,891
March	5,586,263	1,699,915	4,640	7,290,818
April	4,881,225	2,297,026	1,469	7,179,720
May	5,690,587	2,886,342	89	8,577,018
June	11,941,955	3,698,144	9	15,640,108
July	26,440,376	2,736,640	6	29,177,022
August	28,254,297	5,031,095	728	33,286,120
September	21,817,791	7,852,983	0	29,670,774
October	12,360,877	8,547,191	30,277	20,938,345
November	12,722,765	6,035,042	134,073	18,891,880
December	13,311,510	1,872,552	709,104	15,893,166
Total	158,211,452	44,669,207	924,670	203,805,329

Appendix F. Weight (lb) and ex-vessel value (\$) of menhaden caught off Texas but landed commercially in Louisiana during 1977-1986.

Table F.1. Total weight (lb x 1000) and ex-vessel value (\$ x 1000) of menhaden (*Brevoortia* sp.) caught off Texas but landed commercially in Louisiana during 1977-1986. Data based on NMFS.

Year	Total weight landed	Total ex-vessel value
1977	46,076.1	1,828.8
1978	111,552.8	4,813.5
1979	116,623.3	4,983.3
1980	52,028.6	2,323.6
1981	131,394.2	5,148.0
1982	121,693.9	4,698.6
1983	95,459.2	3,865.1
1984	116,623.3	4,588.0
1985	49,550.6	1,949.3
1986	141,147.3	7,410.2

Appendix G. Weight (lb) of Eastern oyster meat transplanted to private oyster leases, and weight and ex-vessel value (\$) of reported commercial landings from private oyster leases in Texas bay systems during 1977-1986.

Table G.1. Total weight (lb x 1000) and ex-vessel value (\$ x 1000) of commercial landings of Eastern oyster meat from private oyster leases in Texas bays during 1977-1986. Data based on annual oyster location lease reports of private oyster leaseholders.

Year	Total number of leases	Total leased acreage	Total weight landed	Total ex-vessel value
1977	32	1,831.7	1,078.4	1,293.3
1978	35	1,946.9	508.6	577.6
1979	44	2,368.1	40.9	63.4
1980	44	2,368.1	600.0	982.0
1981	45	2,446.9	504.0	799.8
1982	45	2,446.9	704.1	1,034.7
1983	48	2,510.2	1,047.8	1,495.9
1984	47	2,466.3	643.9	1,095.4
1985	44	2,356.2	483.4	876.5
1986	44	2,356.2	1,652.6	3,246.4

Table G.2. Total weight (lb x 1000) of Eastern oyster meat transplanted to private oyster leases in Texas bay systems during 1978^a-1986. Data based on weekly oyster transplant reports submitted to TPWD by oyster leaseholders.

Year	Months												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
1978	0	0	0	0	0	378.0	35.0	0	353.5	245.0	0	0	0
1979	0	0	0	0	0	582.8	0	0	271.3	24.5	0	0	878.5
1980	0	0	0	0	0	355.3	61.3	0	141.8	0	0	0	558.3
1981	0	0	0	0	0	656.3	124.3	0	185.5	318.5	0	0	1,284.5
1982	0	0	0	0	0	372.8	7.0	0	435.8	21.0	0	0	836.5
1983	0	0	0	0	0	871.5	432.3	0	493.5	236.3	0	0	2,033.5
1984	0	0	0	0	341.3	484.8	0	0	761.3	283.5	0	0	1,870.8
1985	0	0	0	0	0	693.0	448.0	273.0	502.3	99.8	0	0	2,016.0
1986	0	0	0	0	0	1,436.9	402.3	530.5	530.4	442.0	123.3	0	3,465.4

^aData prior to 1978 not available.

Table G.3. Total weight (lb x 1000) of Eastern oyster meat landed from private oyster leases in Texas bay systems during 1978^a-1986. Data based on monthly oyster harvest reports submitted to TPWD by oyster leaseholders.

Year	Months												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
1978	60.6	49.8	58.0	55.1	13.5	65.1	83.5	25.7	41.9	53.9	1.6	0	508.7
1979	0.4	1.4	0.7	0	0	0	6.2	0	0	14.1	9.9	5.6	38.3
1980	17.8	16.3	12.8	20.5	47.0	77.2	113.4	76.1	99.5	85.0	1.1	2.1	568.8
1981	26.1	36.3	30.5	38.1	47.6	62.6	67.2	35.1	22.7	49.3	31.4	28.8	475.7
1982	11.6	14.6	26.2	38.7	64.9	63.0	60.4	66.5	64.3	92.1	0	0	502.3
1983	0	25.4	35.6	82.4	120.9	198.9	164.6	65.1	64.5	88.8	11.2	6.9	864.3
1984	8.2	10.5	36.9	45.2	83.9	123.6	42.4	43.9	29.2	104.1	1.4	14.5	543.8
1985	5.4	0	0	6.8	42.4	84.1	83.0	58.4	40.3	65.0	0	0	385.4
1986	51.9	99.2	117.6	160.3	122.1	237.6	240.4	215.7	71.2	129.6	2.7	37.8	1,486.1

^aData prior to 1978 not available.

Appendix H. Number of commercial licenses sold in Texas in each fiscal year (September-August) from 1956 through 1986.

Table H.1. Number of commercial dealer licenses sold in Texas in each fiscal year from 1956 through 1986^a. (The sale of a license occurs when money is received in Austin).

Fiscal year	Retail Fish ^b			Retail			Whole- sale			Shrimp			Menhaden		
	Large	Medium	Small	fish truck	oyster	Bait	fish truck	fish	shrimp	house operator	Bait shrimp	fish plant	fish plant		
1956	2,675	1,444	3,888	75	0	3,936	157	96	0	0	0	0	0	0	0
1957	2,691	1,425	3,841	80	0	3,533	155	88	0	0	0	0	0	0	0
1958	2,792	1,376	3,639	84	0	4,391	1,450	76	0	0	0	0	0	0	0
1959	2,809	1,593	3,963	84	0	5,007	171	73	6	25	0	0	0	0	0
1960	3,163	1,491	3,775	86	0	4,043	175	81	18	582	0	0	0	0	0
1961	3,390	1,499	3,482	78	12	3,865	185	87	9	528	2	0	0	0	0
1962	3,388	1,549	3,564	63	0	3,421	187	72	10	502	5	0	0	0	0
1963	3,414	1,594	3,437	88	2	3,192	201	83	16	500	1	0	0	0	0
1964	3,485	1,650	3,688	76	0	3,260	205	69	29	476	3	0	0	0	0
1965	3,435	1,598	3,585	73	1	3,034	209	71	36	412	2	0	0	0	0
1966	3,467	1,617	3,559	65	0	2,968	234	78	28	417	1	0	0	0	0
1967	3,433	1,573	3,492	46	0	3,272	227	69	29	416	1	0	0	0	0
1968	3,455	1,619	3,477	57	1	3,030	241	74	37	432	1	0	0	0	0
1969	3,545	1,645	3,441	50	0	3,071	203	67	31	405	1	0	0	0	0
1970	3,574	1,599	3,481	53	0	3,169	211	62	33	408	1	0	0	0	0
1971	3,639	1,585	3,418	73	0	3,214	225	62	34	397	1	0	0	0	0
1972	3,761	1,518	3,582	97	0	3,146	219	52	33	439	1	0	0	0	0
1973	3,694	1,551	3,363	122	0	2,928	219	65	33	430	1	0	0	0	0
1974	3,721	1,481	2,794	167	0	2,471	251	54	27	417	0	0	0	0	0
1975	3,639	1,438	2,725	436	0	2,692	250	58	26	417	0	0	0	0	0
1976	3,513	1,449	2,717	490	0	3,000	241	54	27	423	0	0	0	0	0
1977	3,002	1,330	2,703	599	0	3,019	260	67	25	422	0	0	0	0	0
1978	2,919	1,301	2,718	789	0	2,994	260	77	27	420	0	0	0	0	0
1979	2,818	1,211	2,668	602	1	2,874	254	60	28	477	0	0	0	0	0
1980	2,524	1,174	2,494	541	1	2,856	265	44	30	477	0	0	0	0	0
1981	2,481	1,153	2,370	885	3	2,773	254	52	27	500	0	0	0	0	0
1982	2,256	1,147	2,246	1,287	2	2,831	307	83	29	520	0	0	0	0	0
1983	4,755	1,108	2,222	1,175	3	2,980	329	108	47	692	0	0	0	0	0
1984 ^c	6,009	0	0	980	0	2,975	394	72	33	569	0	0	0	0	0
1985	2,683	0	0	932	0	1,393	251	72	19	380	0	0	0	0	0
1986	6,356	0	0	1,071	0	4,062	465	92	37	620	0	0	0	0	0

a License data are not additive across columns for any row since dealers may have multiple licenses.

b Large =Dealer located in a city with > 40,000 population;

Medium=Dealer located in a city with 7,500 to 40,000 population;

Small =Dealer located in a city with < 7,500 population.

c Beginning in fiscal year 1984, all retail fish dealer licenses were combined into one category.

Table H.2. Number of commercial saltwater fishermen licenses sold in Texas in each fiscal year from 1956 through 1986. (The sale of a license occurs when money is received in Austin).

Fiscal year	Tidal water	General			Fintish		
		Non- ^b		Resident Fisherwoman	Vessel	Non- ^b	Menhaden only
		Resident ^a	Fisherwoman			Resident	
1956		10,382					
1957		10,072					
1958		15,554					
1959		16,538					
1960		18,695					
1961		23,634					
1962		23,497					
1963		27,617					
1964		28,586					
1965		27,428					
1966		28,461					
1967		30,902					
1968		25,278					
1969		27,757					
1970		31,642					
1971		34,268					
1972		36,498					
1973		38,007					
1974		33,342					
1975		27,289					
1976		26,651					
1977		27,134					
1978		28,653					
1979	30,644	541	5,182				
1980	2,127	605	19,945	0	2,291	1,987	46
1981	52	636	14,309	2,626	3,491	1,680	444
1982		635	13,468	2,697	3,990	632	16
1983			15,492	3,417	4,021	668	31
1984			13,887	2,926	6,656	482	12
1985			9,291	2,008	4,142	445	26
1986			11,829	2,633	2,781	491	48

^a Until 1979 there were no divisions in the General Commercial Fishing Licenses.

^b Total sales regardless of fee per license which depends on state of residency of purchaser.

Table H.3. Number of commercial saltwater fishing gear licenses sold in Texas in each fiscal year from 1956 through 1986. (The sale of a license occurs when money is received in Austin).

Fiscal year	Saltwater trotline tags	Seine tags	Commercial oyster dredge	Mussel dredge permit (power)
1956		10,832	150	0
1957		10,107	129	0
1958		9,414	30	0
1959		10,467	230	0
1960		11,089	258	0
1961		12,869	374	0
1962		11,269	249	0
1963		12,207	408	1
1964		13,209	153	1
1965		12,784	198	1
1966		13,183	210	0
1967		13,959	153	3
1968		13,704	106	10
1969		13,753	97	2
1970	11,360	14,084	115	0
1971	14,229	14,996	126	0
1972	16,204	13,893	195	0
1973	18,390	15,312	126	0
1974	22,623	17,282	99	0
1975	17,554	16,721	40	0
1976	17,904	17,306	16	0
1977	18,500	15,983	72	0
1978	14,716	14,810	59	0
1979	16,212	17,270	58	2
1980	16,868	13,958	52	8
1981	18,061	9,707	109	1
1982	16,625	8,013	103	2
1983	15,714	8,283	244	0
1984	9,518	6,551	250	1
1985	7,648	7,006	102	0
1986	8,460	7,339	137	1

Table H.4. Number of commercial saltwater boat and vessel licenses sold in Texas in each fiscal year from 1956 through 1986^a. (The sale of a license occurs when money is received in Austin).

Fiscal year	Fishing boat	Fishing Boat (menhaden only)	Gulf shrimp	Bay shrimp	Bay-bait shrimp boat	Bait shrimp boat	Duplicate commercial shrimp boat plates
1956	1,392	39	0	0	0	0	0
1957	1,535	36	0	0	0	0	0
1958	2,466	36	0	0	0	0	0
1959	2,657	47	125	0	0	0	0
1960	2,280	21	1,755	0	1,846	0	0
1961	1,616	24	1,947	0	2,506	0	0
1962	1,396	24	1,655	0	2,456	0	0
1963	1,314	13	1,636	24	3,328	0	0
1964	1,380	17	1,958	1,849		1,196	0
1965	1,236	26	1,958	2,217		1,321	0
1966	1,147	22	1,947	1,969		1,460	0
1967	1,029	27	2,140	1,760		1,752	0
1968	997	39	2,437	1,953		632	0
1969	978	37	2,624	2,457		768	0
1970	1,066	36	2,871	3,218		881	0
1971	1,086	31	2,900	3,743		966	0
1972	1,330	42	3,341	3,995		1,265	0
1973	1,336	54	3,368	3,974		1,365	0
1974	1,482	45	3,239	3,747		1,590	0
1975	1,277	52	2,764	3,523		1,368	0
1976	1,366	51	2,573	2,917		1,406	0
1977	1,601	36	2,881	3,232		1,449	0
1978	1,386	48	3,173	3,768		1,521	0
1979	1,726	43	3,364	4,444		1,752	53
1980	1,530	33	3,308	4,473		2,016	46
1981	1,268	34	3,718	5,215		2,217	58
1982	791	38	4,046	4,479		2,283	69
1983	1,087	41	4,124	4,711		2,723	53
1984	1,116	48	4,663	4,922		3,103	63
1985	807	15	2,921	4,387		2,396	49
1986	1,024	25	3,425	3,613		2,680	53

^aLicense data are not additive across columns for any row since boats may have multiple licenses.