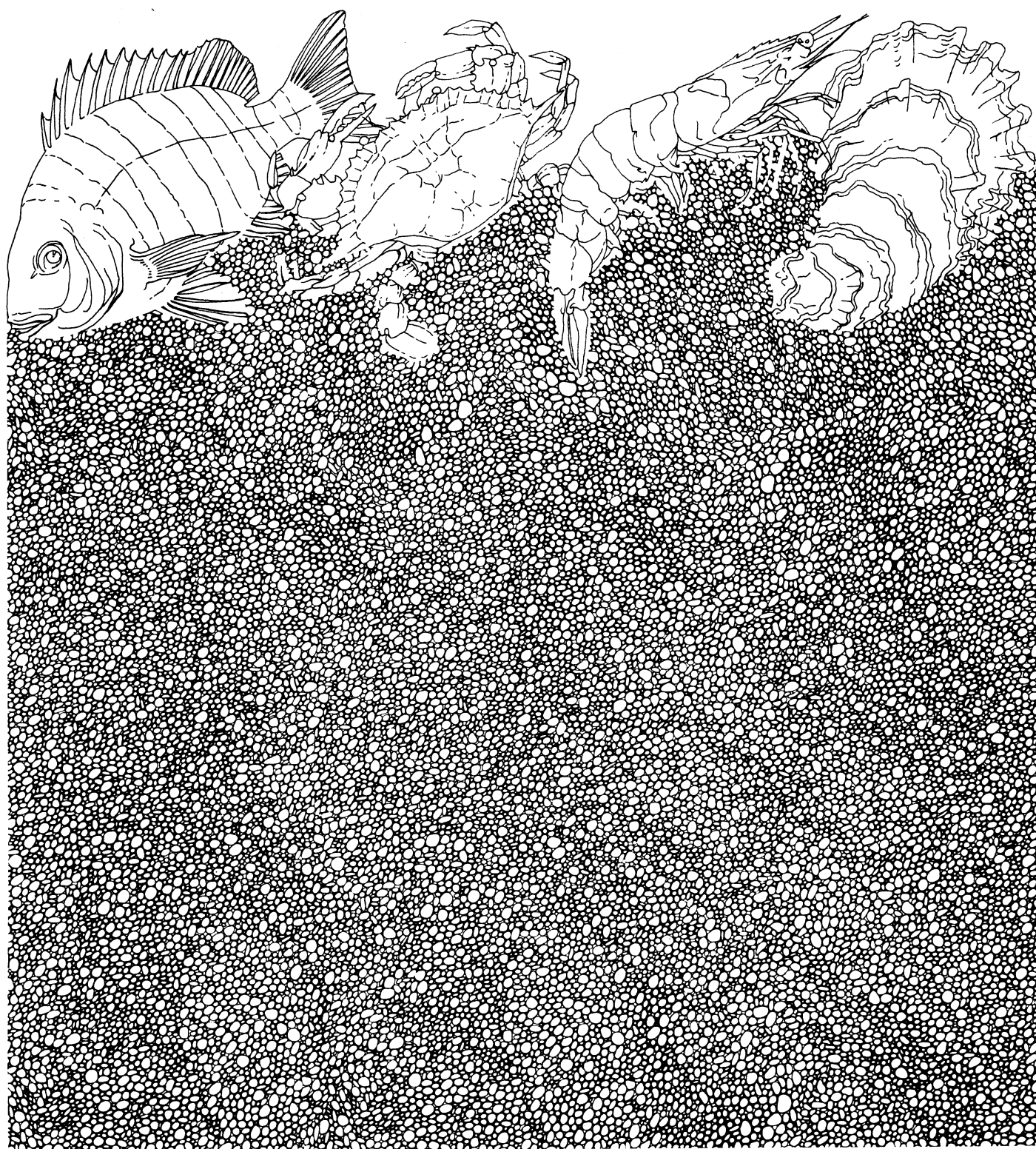


# Comparison of 5.1-cm Stretched Mesh Gill Net Catches in Two Texas Bays

by Ken Rice and H.E. Hegen

Management Data Series Number 115  
1986

Texas Parks and Wildlife Department  
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## ABSTRACT

Small ( $\leq 398$  mm total length) spotted seatrout (Cynoscion nebulosus) were caught on submerged reefs in Aransas and Corpus Christi Bays using multifilament 5.1-cm stretched mesh gill nets during January-April 1977. No significant differences were found in mean lengths or catch rates for spotted seatrout between the two bay systems. Spot (Leiostomus xanthurus) catch rates and silver perch (Bairdiella chrysoura) mean lengths differed significantly between Aransas and Corpus Christi Bays; all other species catch rates and mean lengths were similar. Use of 5.1-cm webbing in the Texas Parks and Wildlife Department (TPWD) monitoring program could provide information on sizes of fishes not presently caught in TPWD gill nets; initiation of an offshore gill net sampling program is not recommended at this time because of budget and manpower constraints.

## INTRODUCTION

In November 1975, the Texas Parks and Wildlife Department (TPWD) initiated a coastwide monitoring program using gill nets (7.6-15.2-cm stretched mesh) to monitor the relative abundance of finfishes (Hegen 1983a). Indices of relative abundance are used to assess the status of bay fish populations.

The TPWD sampling program requires that gill nets be set perpendicular to shore to a distance of 183 m. Shoreline sampling with these gill nets may not adequately sample the entire population structure or a given size of a species. For instance, Matlock et al. (1978) noted the absence of small ( $\leq 398$  mm total length) spotted seatrout (Cynoscion nebulosus) in shoreline areas sampled with 7.6-cm stretched mesh monofilament gill nets. This may be due to the mesh size selectivity of nets or the habitat preference of fish of this size.

Spotted seatrout are found throughout a wide range of habitats, ranging from shallow vegetated areas to deep bays and oyster reefs (Lorio and Perret 1980). The abundance of spotted seatrout in open bay areas and on oyster reefs contributes to the high fishing success for spotted seatrout by private and charter boat recreational fishermen in Aransas Bay, Texas (Heffernan et al. 1977). About 90% of these spotted seatrout ranged in size from 203 to 381 mm total length (TL).

This study was conducted to 1) determine if small spotted seatrout ( $\leq 398$  mm) could be captured on oyster reefs in Aransas Bay and Corpus Christi Bay with a 5.1-cm stretched mesh gill net during winter and early spring and 2) determine the number and size of other fishes caught in these nets.

## MATERIALS AND METHODS

During January-April 1977, multifilament nylon (No. 208) gill nets (76.1 m x 2.1 m) with 5.1-cm stretched mesh were set overnight on selected open water oyster reefs in Aransas and Corpus Christi Bays (Fig. 1; Appendix A). Gill nets were set twice a month in each bay system. Nets were set within 1 h of sunset and picked up within 1 h after sunrise the following morning. Total fishing time (nearest 0.1 h) was recorded. Selected hydrological and meteorological data were recorded at the time of each set and retrieval (Appendix B).

Fish were identified (Parker et al. 1972, Hoese and Moore 1977) and counted for each set in each bay system (Appendix C). Total length of up to 19 individuals of each species were obtained from each set. Mean total lengths for each species were calculated using all individuals which had measured lengths (Appendix C).

Species selected for analyses were based on the criterion that at least one individual of a species was captured in at least four overnight sets in each bay system. These species were hardhead catfish (Arius felis), silver perch (Bairdiella chrysoura), gulf menhaden (Brevoortia patronus), spotted seatrout (Cynoscion nebulosus) and spot (Leiostomus xanthurus); they comprised over 91% of the total catch. Catch rates (No./h) of all species combined and catch rates and mean total lengths of the selected species were examined for significant differences ( $P < 0.05$ ) between bays using non-transformed data in a one-way analysis of variance (Sokal and Rohlf 1981). Identical results following comparison of log-transformed to non-transformed analyses allowed presentation of non-transformed results.

## RESULTS

Small spotted seatrout (<398 mm total length) were caught on submerged oyster reefs in Aransas and Corpus Christi Bays. There were no significant differences in spotted seatrout mean catch rates ( $0.5 \pm 0.1$  fish/hour) or mean sizes ( $283 \pm 13$  mm) between Aransas and Corpus Christi Bays (Tables 1-3). Spotted seatrout comprised 5.8% of the total catch (982 fish) in Aransas Bay and 2.1% of the total catch (2249 fish) in Corpus Christi Bay.

There were significant differences in mean catch rates and mean total lengths between bays for spot and silver perch, respectively (Tables 2 and 3). Mean catch rate of spot in Corpus Christi Bay ( $2.0 \pm 0.4$  fish/h) was ten times higher than recorded in Aransas Bay ( $0.2 \pm 0.1$  fish/h). The mean total length of silver perch in Aransas Bay and Corpus Christi Bay was  $177 \pm 3$  and  $185 \pm 2$  mm, respectively (Table 1). All other species mean catch rates and total lengths were similar between bays (Table 1.)

The hydrological and meteorological data ranges were similar between the two bay systems except for salinity, during January-April 1977 (Appendix B). Mean salinity in Aransas Bay was 8.5 ppt while the mean in Corpus Christi Bay was 21.8 ppt.

## DISCUSSION

The 5.1-cm mesh gill net catches smaller spotted seatrout than are caught with the smallest mesh (7.6-cm) used in the routine shoreline TPWD monitoring program. The average lengths of spotted seatrout in this study were 88 and 130 mm smaller than the 8-year (1975-1983) mean total lengths of spotted seatrout caught in 7.6-cm mesh nets in Corpus Christi (388 mm TL) and Aransas (396 mm TL) Bays, respectively

(McEachron and Green 1985). The direct relationship between mesh size and fish size (length) is well documented (Hamley 1975, Hegen 1983b).

This study verified that small spotted seatrout ( $\leq 300$  mm TL) could be caught over oyster reefs. The TPWD gill net sampling (minimum mesh size 7.6-cm stretch) during November 1975-March 1976 indicated the presence of spotted seatrout in offshore but not necessarily reef areas (Matlock et al. 1978). Present budget and manpower constraints prohibit the initiation of an extensive offshore gill net sampling program without alteration to the current program and potential loss of data precision.

Although the 5.1-cm stretched mesh gill nets could provide data on spotted seatrout  $\leq 300$  mm TL from oyster reefs before they are harvested by recreational fishermen (minimum size 356 mm TL) alterations of the current sampling program are not recommended. The TPWD sampling programs are designed to obtain data on all organisms captured in standard gears at randomly selected sites. Shoreline sampling with bag seines currently provides annual relative abundance of pre-harvest size ( $\sim 80$  mm TL) spotted seatrout (McEachron and Green 1985). The shoreline gill net sampling program can detect statistical differences in spotted seatrout catch rates among years (Hegen et al. 1983, McEachron and Green 1986).

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Table 1. Seasonal catch rate (No./h  $\pm$  1SE) and mean total length (mm) of selected species caught with a 5.1-cm stretched mesh gill net in Aransas and Corpus Christi Bay during January-April 1977.

Species	Catch rate			Total length		
	Aransas	Corpus Christi	Combined	Aransas	Corpus Christi	Combined
Gulf menhaden	4.8 $\pm$ 2.2	9.2 $\pm$ 4.6	7.0 $\pm$ 2.5	181 $\pm$ 13	178 $\pm$ 7	180 $\pm$ 8
Hardhead catfish	2.8 $\pm$ 1.4	3.2 $\pm$ 2.1	3.0 $\pm$ 1.2	254 $\pm$ 9	242 $\pm$ 5	248 $\pm$ 5
Silver perch	0.4 $\pm$ 0.2	4.5 $\pm$ 2.0	2.4 $\pm$ 1.1	177 $\pm$ 3	185 $\pm$ 2	184 $\pm$ 1 <sup>b</sup>
Spot	0.2 $\pm$ 0.1	2.0 $\pm$ 0.4	1.1 $\pm$ 0.2 <sup>a</sup>	170 $\pm$ 3	174 $\pm$ 2	172 $\pm$ 2
Spotted seatrout	0.6 $\pm$ 0.2	0.4 $\pm$ 0.2	0.5 $\pm$ 0.1	266 $\pm$ 17	300 $\pm$ 19	283 $\pm$ 13
All species	9.3 $\pm$ 3.7	21.5 $\pm$ 6.8	15.4 $\pm$ 4.1			

<sup>a</sup>Combined catch rate weighted by acreage of bays due to significant differences.

<sup>b</sup>Combined mean length weighted by number of fishes caught in each bay due to significant differences.

Table 2. One-way analysis of variance of catch rates of selected species caught with a 5.1-cm stretched mesh gill net between Aransas Bay and Corpus Christi Bay during January-April 1977.

Group	Source of variation	Degrees of freedom	Mean square	F
Gulf menhaden	Total	15	101.896	0.712
	Bays	1	73.960	
	Error	14	103.891	
Hardhead catfish	Total	15	24.401	0.023
	Bays	1	0.601	
	Error	14	26.101	
Silver perch	Total	15	20.107	4.177
	Bays	1	69.306	
	Error	14	16.592	
Spot	Total	15	1.603	16.375*
	Bays	1	12.960	
	Error	14	0.791	
Spotted seatrout	Total	15	0.307	0.123
	Bays	1	0.040	
	Error	14	0.326	
All species	Total	15	266.266	2.429
	Bays	1	590.490	
	Error	14	243.107	

\*  $P < 0.05$

Table 3. One-way analysis of variance of mean total lengths of selected species caught with a 5.1-cm stretched mesh gill net between Aransas Bay and Corpus Christi Bay during January-April 1977.

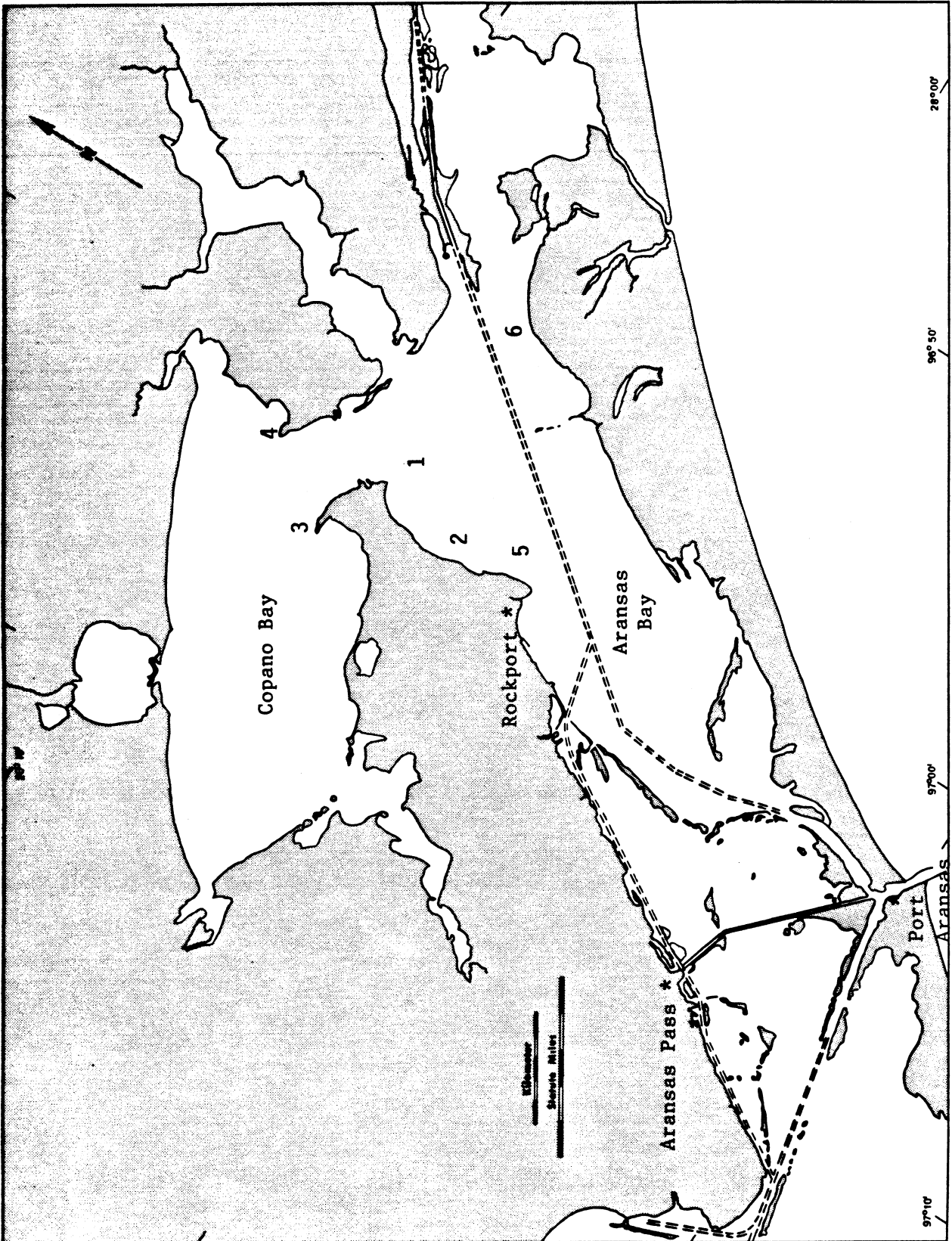
Group	Source of variation	Degrees of freedom	Mean square	F
Gulf menhaden	Total	12	914.577	0.037
	Bays	1	36.623	
	Error	11	994.331	
Hardhead catfish	Total	7	239.982	1.305
	Bays	1	300.125	
	Error	6	229.953	
Silver Perch	Total	11	41.061	6.875*
	Bays	1	184.010	
	Error	10	26.766	
Spot	Total	14	58.781	1.270
	Bays	1	73.219	
	Error	13	57.670	
Spotted seatrout	Total	11	2094.545	1.813
	Bays	1	3536.333	
	Error	10	1950.367	

\*  $P \leq 0.05$

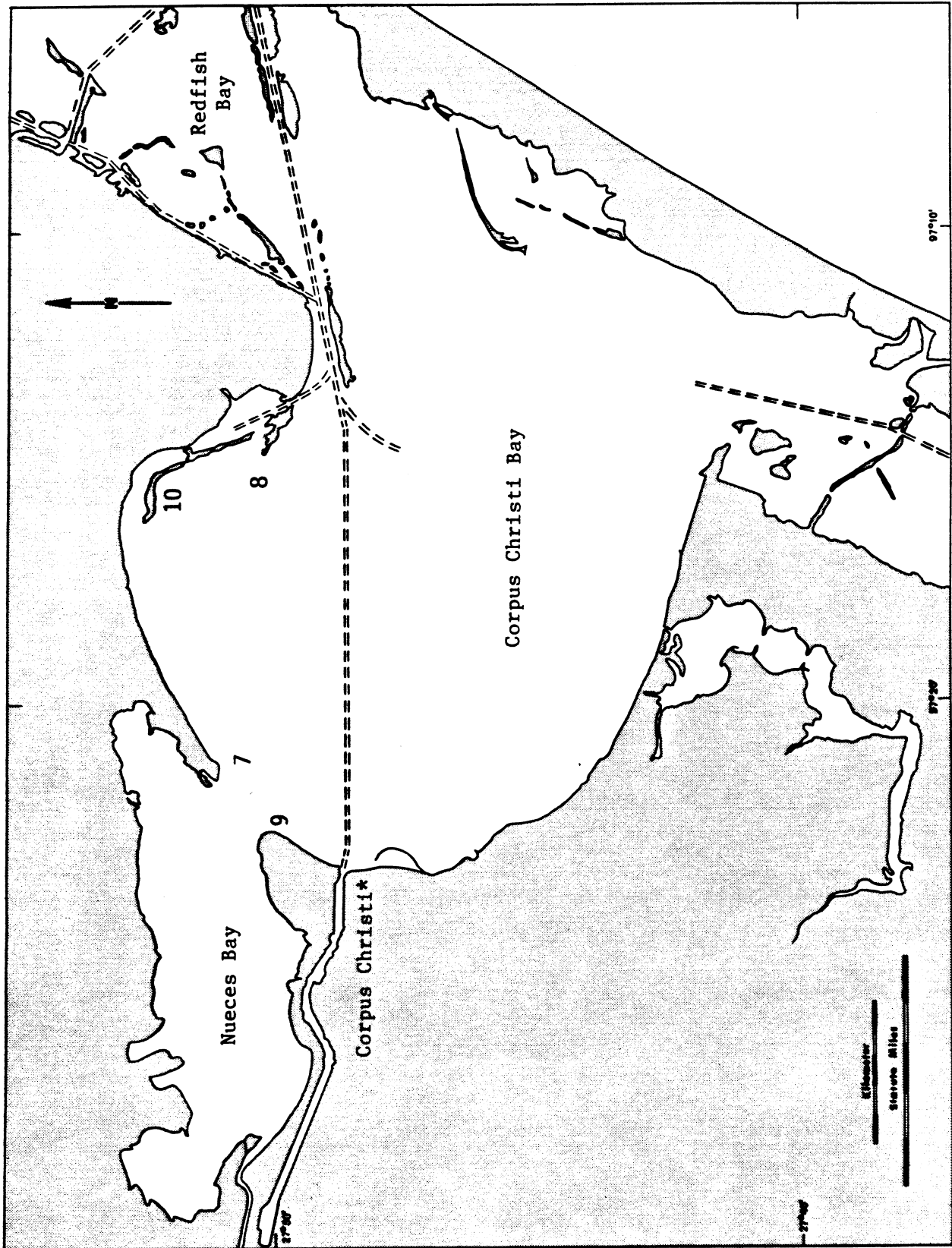
Figure 1. Gill net station locations during January-April 1977.

(A) Aransas Bay

(B) Corpus Christi Bay



(A)



(B)

Appendix A. Gill net station locations.

Table A.1. Station location and fishing time (h) for 5.1-cm stretched mesh gill nets in Aransas and Corpus Christi Bays during January-April 1977.

Bay	Date	Station number	Location	Fishing time (h)	Latitude	Longitude
Aransas	Jan 10	1	Half Moon Reef	14.5	28°04'20"	96°59'30"
	Jan 13	2	Broomstick Reef	14.5	28°04'30"	97°01'30"
	Feb 09	3	Redfish Point Reef	13.9	28°06'50"	97°03'45"
	Feb 14	4	Newcomb Reef	14.2	28°09'00"	97°02'30"
	Mar 22	5	Iron Stake Reef	13.7	28°03'00"	97°01'10"
	Mar 24	6	Spaulding Reef	16.0	28°06'30"	96°54'30"
	Apr 05	1	Half Moon Reef	12.2	28°04'20"	96°59'30"
	Apr 07	3	Redfish Point Reef	13.0	28°06'50"	97°03'45"
Corpus Christi	Jan 21	7	Indian Point Reef	14.3	27°50'30"	97°20'30"
	Jan 31	8	Long Reef	14.6	27°50'30"	97°15'30"
	Feb 03	9	Rincon Point Reef	14.1	27°49'40"	97°22'30"
	Feb 24	10	LaQuinta Island Reef	14.0	27°52'00"	97°15'30"
	Mar 07	8	Long Reef	13.2	27°50'30"	97°15'30"
	Mar 28	7	Indian Point Reef	14.1	27°50'30"	97°20'30"
	Apr 13	8	Long Reef	12.7	27°50'30"	97°15'30"
	Apr 26	9	Rincon Point Reef	12.5	27°49'40"	97°22'30"



Appendix B. Hydrological and meteorological data collected during  
5.1 cm mesh gill net sets in Aransas Bay and Corpus  
Christi Bay during January-April 1977.

Table B.1. Explanation of hydrological and meteorological abbreviations and codes.

Code	Explanation
Time	I = Initial (time of set); F = Final (time of pickup).
WS	Wind speed (Km/h)
WD	Wind direction from: 1 = north; 2 = northeast; 3 = east; 4 = southeast; 5 = south; 6 = southwest 7 = west; 8 = northwest
Tide	1 = slack; 2 = ebb; 3 = flood
CC	Cloud Cover: 1 = 0-9%; 2 = 10-25%; 3 = 26-50%; 4 = 51-75%; 5 = 76-90%; 6 = 91-100%
Precip	Precipitation: 1 = slight; 2 = heavy; 3 = none
Fog	1 = fog present; 2 = none
SC	Sea Conditions: 1 = calm; 2 = choppy; 3 = rough
Depth range	Depth in meters (m) at each end of net
Turb	Turbidity: Jackson Turbidity Units (JTU)
Temp	Temperature: (C)
Sal	Salinity: o/oo
DO	Dissolved Oxygen: ppm
BP	Barometric Pressure in centimeters (cm) of mercury (Hg) not compensated for temperature.
BT	Bottom Type: 1 = mud; 2 = sand; 3 = shell; 4 = clay
Veg	Vegetation: 1 = none; 2 = sparse; 3 = moderate; 4 = dense

Table B.2. Hydrological and meteorological data recorded during gill net sets in Aransas Bay.

Date	Time	WS (Km/h)	WD	Tide	CC	Precip	Fog	SC	Depth Range (m)	Turb (JTU)	Temp (C)		Sal (o/oo)	DO (ppm)	BP (cm Hg)	BT	Veg
											Air	Water					
Jan 10	I	8.0	4	3	1	3	2	1	1.8-1.9	37	5.0	8.0	6.0	13.0	77.01	1,3	1
	F	16.1	2	3	6	3	2	2	1.8-1.9	36	7.0	7.5	6.0	12.0	76.73	1,3	1
Jan 13	I	16.1	8	2	6	1	2	1	2.6-2.7	27	14.0	10.0	8.0	13.0	75.95	3	1
	F	16.1	1	3	6	3	2	2	2.4-2.7	24	11.0	9.5	8.0	13.0	76.05	3	1
Feb 09	I	19.3	1	3	6	1	1	2	1.5-2.0	78	12.0	11.5	8.0	11.0	76.58	1,3	1
	F	9.7	3	3	6	1	1	1	1.5-2.0	43	14.5	12.0	6.0	10.0	76.33	1,3	1
Feb 14	I	12.9	4	2	1	3	2	1	2.0-2.1	56	19.0	17.0	4.0	11.0	76.20	1,3	1
	F	32.2	2	2	6	3	2	3	2.0-2.1	98	11.0	13.0	4.0	10.0	76.61	1,3	1
Mar 22	I	29.0	3	2	1	3	2	2	2.4-2.4	125	16.5	18.5	16.0	9.0	76.81	1,3	1
	F	24.1	3	3	6	3	2	3	2.4-2.4	75	15.0	17.0	15.0	8.0	76.43	1,3	1
Mar 24	I	12.9	4	2	6	3	2	1	2.0-2.0	40	21.5	18.5	12.0	12.0	75.84	2,3	1
	F	19.3	2	3	6	3	1	1	2.0-2.0	27	22.0	19.0	12.0	11.0	76.00	2,3	1
Apr 05	I	24.1	4	2	1	3	2	2	1.0-1.4	41	18.5	19.0	8.0	10.0	76.87	2,3	1
	F	12.9	4	3	1	3	2	1	1.0-1.4	31	15.5	19.0	7.0	9.0	77.01	2,3	1
Apr 07	I	29.0	4	2	1	3	2	2	2.0-2.0	30	22.0	21.5	8.0	9.0	77.04	2,3	2
	F	12.9	4	2	1	3	2	1	2.0-2.0	24	18.5	20.0	8.0	9.0	76.96	2,3	2

Table B.3. Hydrological and meteorological data recorded during gill net sets in Corpus Christi Bay.

Date	Time	WS (Km/h)	WD	Tide	CC	Precip	Fog	SC	Depth Range (m)	Turb (JTU)	Temp (C)		Sal (o/oo)	DO (ppm)	BP (cm Hg)	BT	Veg
											Air	Water					
Jan 20	I	12.9	4	3	3	3	2	2	2.4-2.7	24	10.0	10.5	20.0	13.0	76.81	1,3	1
	F	8.0	2	2	6	3	2	1	2.4-2.9	24	10.0	9.0	22.0	12.0	76.96	1,3	1
Jan 31	I	12.9	1	3	6	3	2	1	1.8-2.0	24	6.0	9.5	24.0	13.0	76.84	2,3	1
	F	16.1	2	2	6	1	2	2	1.4-1.8	24	7.0	8.0	23.0	12.0	76.51	2,3	1
Feb 03	I	20.9	1	1	1	3	2	2	2.1-2.4	24	14.0	10.5	16.0	13.0	76.33	2,3	1
	F	8.0	8	2	1	3	2	1	2.4-2.6	24	6.5	9.5	22.0	11.0	76.48	2,3	1
Feb 24	I	35.4	5	3	1	3	2	3	2.2-3.2	180	20.0	18.5	24.0	10.0	76.00	1,2,3	1
	F	40.2	5	2	6	3	2	3	2.2-3.2	230	18.0	17.5	24.0	10.0	75.77	1,2,3	1
Mar 07	I	24.1	4	1	1	3	2	2	1.6-2.0	25	17.0	16.0	25.0	9.0	76.91	1,2,3	1
	F	12.9	4	3	1	3	2	1	1.6-2.0	24	11.5	14.0	25.0	9.0	76.84	1,2,3	1
Mar 29	I	16.1	4	3	4	3	2	3	3.2-3.4	45	22.5	19.5	26.0	10.0	73.86	3	1
	F	3.2	3	2	6	3	2	1	3.0-3.2	31	21.0	19.5	25.0	8.0	75.46	3	1
Apr 14	I	45.1	4	1	6	3	2	3	1.7-2.0	67	23.0	23.0	28.0	9.0	75.77	2,3	1
	F	37.0	4	1	6	3	2	2	1.7-2.0	68	22.0	22.0	28.0	9.0	76.00	2,3	1
Apr 27	I	25.7	3	3	6	3	2	3	2.0-2.4	24	25.0	25.0	9.0	10.0	76.33	3	1
	F	19.3	4	2	1	3	2	2	1.8-2.1	24	21.0	23.0	8.0	9.0	76.45	3	1

Appendix C. Species catch data.

Table C.1. Number and mean total length ( $\pm$  1 SE) of each species caught with a 5.1-cm stretched mesh gill net during January-April 1977 in Aransas Bay (AB) and Corpus Christi Bay (CCB). Number in parentheses = hours of set. Blanks = No data.

Species	Bay	January		February		March		April		Total	Mean total length
		Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2		
		(14.5)	(14.5)	(13.9)	(14.2)	(13.7)	(16.0)	(12.1)	(13.0)		
<u>Alosa chrysochloris</u>	AB	(14.3)	(14.6)	(14.1)	(14.0)	(13.2)	(14.1)	(12.7)	(12.5)	(111.9)	(109.5)
	CCB	0	0	0	0	0	0	1	2	3	229 $\pm$ 11
<u>Arius felis</u>	AB	0	0	0	0	31	61	143	58	293	254 $\pm$ 9
	CCB	0	0	0	0	5	60	45	216	326	242 $\pm$ 5
<u>Bagre marinus</u>	AB	0	0	0	0	0	0	3	1	4	551 $\pm$ 14
	CCB	0	0	0	0	0	0	5	13	18	402 $\pm$ 39
<u>Bairdiella chrysoura</u>	AB	0	1	0	0	6	6	14	11	38	177 $\pm$ 3
	CCB	6	0	90	18	3	161	22	185	485	185 $\pm$ 2
<u>Brevoortia gunteri</u>	AB	0	0	0	1	12	1	0	0	14	222 $\pm$ 16
	CCB	0	0	0	1	0	0	0	2	3	311 $\pm$ 20
<u>B. patronus</u>	AB	19	56	10	50	8	1	144	218	506	181 $\pm$ 13
	CCB	0	0	12	0	377	16	374	165	944	178 $\pm$ 7
<u>Cynoscion arenarius</u>	AB	0	1	0	0	0	0	0	0	1	261
	CCB	2	0	1	32	6	3	0	15	59	286 $\pm$ 4
<u>C. nebulosus</u>	AB	0	1	0	18	1	5	22	10	57	266 $\pm$ 17
	CCB	11	0	16	5	0	1	11	4	48	300 $\pm$ 19
<u>Dasyatis sabina</u>	AB	0	0	0	0	1	0	0	0	1	245
	CCB	0	0	0	0	0	0	0	0	0	0

Table C.1. (Cont'd.).

Species	Bay	January		February		March		April		Total	Mean total length	
		Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2			
<u>Dorosoma cepedianum</u>	AB	(14.5)	(14.5)	(13.9)	(14.2)	(13.7)	(16.0)	(12.1)	(13.0)	(111.9)	12	190 ± 4
	CCB	(14.3)	(14.6)	(14.1)	(14.0)	(13.2)	(14.1)	(12.7)	(12.5)	(109.5)	5	197 ± 11
<u>D. petenense</u>	AB	0	1	1	2	2	1	3	2	0	12	190 ± 4
	CCB	0	0	1	0	0	0	0	4	0	5	197 ± 11
<u>Gobioides broussonneti</u>	AB	0	0	0	0	0	0	0	0	0	0	185 ± 4
	CCB	0	0	1	0	1	1	0	0	0	3	185 ± 4
<u>Lagodon rhomboides</u>	AB	0	0	1	0	0	0	0	0	1	1	139 ± 3
	CCB	1	0	0	8	7	1	4	0	0	21	141 ± 4
<u>Larimus fasciatus</u>	AB	0	0	0	0	0	0	0	0	0	0	191 ± 4
	CCB	0	0	0	0	0	2	0	3	5	5	191 ± 4
<u>Leiostomus xanthurus</u>	AB	1	0	3	2	10	3	4	5	28	28	170 ± 3
	CCB	28	1	7	49	32	38	43	23	221	221	174 ± 2
<u>Lepisosteus spatula</u>	AB	0	0	0	1	0	0	0	2	3	3	1248 ± 82
	CCB	0	0	0	0	0	0	0	0	0	0	1248 ± 82
<u>Menticirrhus americanus</u>	AB	0	0	0	0	0	0	1	0	1	1	231 ± 9
	CCB	0	0	0	0	11	0	8	0	19	19	231 ± 9
<u>Microgogonias undulatus</u>	AB	0	0	0	0	1	0	1	0	2	2	177
	CCB	1	0	1	2	1	29	8	17	59	59	199 ± 1

Table C.1. (Cont'd.).

Species	Bay	January		February		March		April		Total	Mean total length
		Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2		
<u>Mugil cephalus</u>	AB	(14.5)	(14.5)	(13.9)	(14.2)	(13.7)	(16.0)	(12.1)	(13.0)	(111.9)	
	CCB	(14.3)	(14.6)	(14.1)	(14.0)	(13.2)	(14.1)	(12.7)	(12.5)	(109.5)	
<u>Orthopristis chrysoptera</u>	AB	0	0	0	0	0	0	0	0	0	278
	CCB	0	0	0	0	0	1	0	0	1	
<u>Paralichthys lethostigma</u>	AB	0	0	0	0	0	0	0	0	0	177
	CCB	0	0	0	0	0	0	0	0	0	
<u>Peprilus paru</u>	AB	0	0	0	0	0	0	1	0	1	116
	CCB	0	0	0	0	0	0	0	0	0	
<u>P. burti</u>	AB	0	0	0	0	1	0	0	0	1	105
	CCB	0	0	0	0	1	0	3	0	4	98 ± 11
<u>Pogonias cromis</u>	AB	0	0	0	0	0	0	1	0	1	1130
	CCB	0	0	0	0	0	0	0	0	0	
<u>Porichthys porosissimus</u>	AB	0	0	0	0	0	2	1	0	3	186 ± 1
	CCB	0	0	0	0	0	1	0	8	9	183 ± 4
<u>Prionotus rubio</u>	AB	0	0	0	0	1	0	0	0	1	155
	CCB	0	0	0	0	0	0	0	0	0	
<u>Scomberomorus maculatus</u>	AB	0	0	0	0	0	0	0	0	0	478
	CCB	0	0	0	0	0	0	1	0	1	



Table C.1. (Cont'd).

Species	Bay	January		February		March		April		Total	Mean total length
		Set 1	Set 2	Set 1	Set 2	Set 1	Set 2	Set 1	Set 2		
<u>Stellifer lanceolatus</u>	AB	0	0	0	0	0	0	0	0	0	179 ± 4
	CCB	0	0	0	0	0	4	0	0	4	
<u>Strongylura marina</u>	AB	1	0	0	0	0	0	0	0	1	331
	CCB	0	0	0	0	0	0	0	0	0	
<u>Symphurus plagiusa</u>	AB	0	0	0	0	0	0	0	0	0	176
	CCB	0	0	0	0	0	0	1	0	1	
<u>Trichiurus lepturus</u>	AB	0	0	0	0	0	0	0	0	0	850 ± 54
	CCB	0	0	1	0	0	0	0	1	2	
<u>Trinectes maculatus</u>	AB	0	0	0	0	0	0	0	0	0	106
	CCB	0	1	0	0	0	0	0	0	1	
<u>Urophycis floridanus</u>	AB	0	0	0	0	0	0	0	0	0	247
	CCB	0	0	0	0	0	0	1	0	1	
Total	AB	21	60	15	74	74	81	347	310	982	2249
	CCB	49	2	130	120	444	318	528	658	2249	

