

SEAMAP Fall 2005 Groundfish Survey Cruise Report

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Introduction

SEAMAP Fall groundfish cruises are conducted to provide fishery-independent monitoring and assessment information essential to management of Texas Gulf of Mexico fisheries resources in a coordinated and cost-efficient program. Fishery-independent information is that collected without direct reliance on statistics reported by commercial or recreational fishermen.

Objectives

1. Conduct a fall trawl survey to collect information on shrimp and groundfish abundance and distribution with standard TPWD 20-ft trawls.
2. Select 80 stations for random sampling. All species are identified, weighed and counted, and selected species are sexed and measured according to Texas SEAMAP Operations Manual.
3. Collect information on environmental parameters (salinity, temperature, dissolved oxygen, wind speed and direction, wave height, cloud cover) in conjunction with trawl sampling.
4. Code all data according to approved Texas SEAMAP Operations Manual guidelines, and enter data on the Texas SEAMAP data entry system.
5. Submit data to the Gulf States Marine Fisheries Commission/NMFS Data Manager.

Methods

Vessels that participated in the Texas Fall Groundfish Survey include: Sabine Lake (40), San Jacinto (69), Matagorda Bay (32), Nueces Bay (67), Trinity Bay (65) and Laguna Madre (31). All Texas Territorial Seas was sectioned into 1-minute latitude by 1-minute longitude grids. Grids at least 1/3 of which is within the territorial sea equal to or greater than 1.8 m (1 fm) deep and at least 1/3 of which is free from known obstructions, were selected at random by computer programs. Sampling was conducted in 16 grids from each of the five gulf areas (Sabine Pass, Bolivar Pass, Matagorda Pass, Aransas Pass, and Brazos Santiago Pass). Eight trawls samples were collected in each gulf area between the and of the month and 8 between the and the last day of the month. A 20 ft trawl with 1.5 inch stretched mesh was lowered into position at the selected site and towline was set at a

5:1 cable length water depth ratio. Trawl towing was conducted at or near 3 mph for 10 minutes after lockdown, and towed parallel to fathom curve. Direction of first tow was randomly selected. Subsequent tows alternated tow direction.

Sample workup and data processing was conducted in accordance with the Texas SEAMAP Operations Manual guidelines. Data was entered and checked with the Texas SEAMAP Data Entry Database.

Environmental data were collected in conjunction with each trawl. Temperature and dissolved Oxygen values were measured with YSI 85 at each trawl station. Three water bottles samples (surface, mid, and bottom) were collected at each station for in lab salinity measurements using a YSI 610DM.

Results

Texas vessels collected 80 Fall Groundfish survey samples in Texas Territorial Seas (between latitudes 57' and 29° 33' and longitudes -93° 37' and - 06') (Table 1). Samples were collected between November , 2005 and November , 2005.

A total of 1008 biological and 4895 length frequency records were recorded (Table 1)

Deviations

There were no significant deviations.

Cruise participants:

Texas Parks and Wildlife Staff collected samples. Sample summary and data entry completed by Paul Choucair and Domingo Sanchez.

Submitted By:

Paul Choucair

SEAMAP Subcommittee member

Table 1. TPWD SEAMAP 2005 Fall groundfish cruise report summary.

| STA# | DATE | | LAT | LONG | STAT ZONE | MAX DEPTH | D.O | | | SALINITY | | | TEMPERATUR | | | FIN CATCH | CRUS CATCH | OTHR CATCH | MIN FISHER | BIO COUNT | LENGTH COUNT | OP |
|------------------|------------|------|-----------|------------|-----------|-----------|-----|-----|-----|----------|------|------|------------|------|------|-----------|------------|------------|------------|-----------|--------------|----|
| | MM/DD/YY | TIME | | | | | SUR | MID | MAX | SUR | MID | MAX | SUR | MID | MAX | | | | | | | |
| 31 R.J.KEMP | | | | | | | | | | | | | | | | | | | | | | |
| 31001 | 11/9/2005 | 759 | 26 02.78' | -97 08.50' | 21 | 7.5 | 5.6 | 5.6 | 5.7 | 33.7 | 33.8 | 33.8 | 25.8 | 25.8 | 25.8 | 0.008 | 0.007 | 0.022 | 10 | 4 | 9 | |
| 31002 | 11/9/2005 | 857 | 25 57.35' | -97 05.52' | 22 | 18.0 | 6.3 | 5.8 | 4.7 | 33.0 | 33.2 | 34.7 | 25.5 | 26.1 | 26.3 | 2.984 | 0.014 | 0.062 | 10 | 9 | 31 | |
| 31003 | 11/9/2005 | 1000 | 26 00.75' | -97 00.58' | 21 | 25.2 | 6.4 | 6.3 | 4.7 | 32.7 | 33.8 | 35.2 | 25.5 | 25.9 | 26.9 | 1.260 | 0.022 | 0.143 | 10 | 18 | 81 | |
| 31004 | 11/9/2005 | 1050 | 26 03.42' | -96 59.45' | 21 | 26.4 | 6.3 | 6.1 | 5.3 | 32.7 | 33.6 | 35.1 | 25.6 | 26.1 | 26.7 | 1.285 | 0.124 | 0.037 | 10 | 13 | 75 | |
| 31005 | 11/9/2005 | 1139 | 26 06.75' | -97 01.47' | 21 | 23.4 | 6.4 | 6.3 | 5.3 | 32.7 | 33.5 | 34.8 | 25.7 | 25.8 | 26.3 | 1.306 | 0.149 | 0.138 | 10 | 17 | 74 | |
| 31006 | 11/9/2005 | 1215 | 26 07.45' | -97 02.62' | 21 | 21.6 | 6.4 | 6.3 | 4.8 | 32.7 | 33.5 | 34.5 | 25.6 | 25.8 | 26.3 | 1.763 | 0.051 | 0.179 | 10 | 12 | 59 | |
| 31007 | 11/9/2005 | 1308 | 26 08.83' | -97 08.67' | 21 | 13.8 | 6.0 | 5.7 | 5.3 | 34.0 | 34.4 | 33.6 | 26.1 | 26.6 | 26.1 | 0.332 | 0.000 | 0.089 | 10 | 5 | 37 | |
| 31008 | 11/9/2005 | 1358 | 26 04.38' | -97 06.57' | 21 | 16.0 | 6.2 | 5.9 | 5.3 | 33.9 | 33.3 | 33.8 | 25.8 | 26.0 | 26.2 | 1.676 | 0.000 | 0.071 | 10 | 7 | 34 | |
| 31009 | 11/22/2006 | 850 | 26 09.33' | -97 05.43' | 21 | 17.7 | 6.7 | 6.9 | 6.4 | 34.5 | 34.6 | 34.6 | 22.7 | 22.4 | 21.9 | 2.198 | 0.039 | 0.035 | 10 | 6 | 26 | |
| 31010 | 11/22/2006 | 938 | 26 10.77' | -97 02.40' | 21 | 21.6 | 7.0 | 6.8 | 6.6 | 34.2 | 34.2 | 34.3 | 23.1 | 23.1 | 22.6 | 0.205 | 0.000 | 0.000 | 10 | 12 | 28 | |
| 31011 | 11/22/2006 | 1026 | 26 14.33' | -97 04.45' | 21 | 17.7 | 7.2 | 7.2 | 7.1 | 34.2 | 34.2 | 34.2 | 22.9 | 22.8 | 22.3 | 0.035 | 0.000 | 0.088 | 10 | 2 | 9 | |
| 31012 | 11/22/2006 | 1121 | 26 19.75' | -97 02.50' | 21 | 21.7 | 7.2 | 7.0 | 6.9 | 34.0 | 34.0 | 34.2 | 22.7 | 22.4 | 22.2 | 0.152 | 0.000 | 0.000 | 10 | 9 | 32 | |
| 31013 | 11/22/2006 | 1157 | 26 19.27' | -97 03.40' | 21 | 18.9 | 7.4 | 7.2 | 6.1 | 33.9 | 34.0 | 34.2 | 22.5 | 22.1 | 22.1 | 0.006 | 0.000 | 0.024 | 10 | 2 | 6 | |
| 31014 | 11/22/2006 | 1300 | 26 21.63' | -97 08.42' | 21 | 15.7 | 6.9 | 7.3 | 6.8 | 33.9 | 33.8 | 33.9 | 22.2 | 21.9 | 21.6 | 0.288 | 0.000 | 0.000 | 10 | 9 | 55 | |
| 31015 | 11/22/2006 | 1347 | 26 19.17' | -97 09.47' | 21 | 15.6 | 7.2 | 7.2 | 6.2 | 34.1 | 34.1 | 34.1 | 21.8 | 21.4 | 21.2 | 0.015 | 0.000 | 0.000 | 10 | 12 | 53 | |
| 31016 | 11/22/2006 | 1508 | 26 15.78' | -97 08.45' | 21 | 15.4 | 7.1 | 7.1 | 6.8 | 34.4 | 34.4 | 34.4 | 22.5 | 22.1 | 22.0 | 0.124 | 0.000 | 0.000 | 10 | 9 | 51 | |
| 32 MATAGORDA BAY | | | | | | | | | | | | | | | | | | | | | | |
| 32001 | 11/2/2005 | 910 | 28 20.45' | -96 19.55' | 19 | 13.4 | 6.8 | 6.9 | 6.1 | 30.1 | 30.1 | 31.6 | 21.2 | 21.3 | 23.3 | 2.533 | 0.275 | 0.219 | 10 | 17 | 113 | |
| 32002 | 11/2/2005 | 950 | 28 20.50' | -96 17.52' | 19 | 15.5 | 6.7 | 6.9 | 6.2 | 30.2 | 30.3 | 32.1 | 21.3 | 21.3 | 23.5 | 2.416 | 0.077 | 0.281 | 10 | 16 | 108 | |
| 32003 | 11/2/2005 | 1022 | 28 20.48' | -96 16.45' | 19 | 16.1 | 6.7 | 6.9 | 6.0 | 30.2 | 30.6 | 32.5 | 21.2 | 21.2 | 23.6 | 3.416 | 0.024 | 0.114 | 10 | 15 | 107 | |
| 32004 | 11/2/2005 | 1120 | 28 21.55' | -96 10.53' | 19 | 17.9 | 6.3 | 6.6 | 6.4 | 32.0 | 32.1 | 32.2 | 23.2 | 23.1 | 23.2 | 1.314 | 0.047 | 0.244 | 10 | 15 | 68 | |
| 32005 | 11/2/2005 | 1225 | 28 26.50' | -96 05.53' | 19 | 14.9 | 6.6 | 6.6 | 6.4 | 31.5 | 31.5 | 31.6 | 22.9 | 22.9 | 22.9 | 0.662 | 0.000 | 0.210 | 10 | 10 | 66 | |
| 32006 | 11/2/2005 | 1313 | 28 30.53' | -96 09.55' | 19 | 7.6 | 6.7 | 7.0 | 6.9 | 30.2 | 30.1 | 30.1 | 21.4 | 21.3 | 21.2 | 1.348 | 1.017 | 0.365 | 10 | 24 | 110 | |
| 32007 | 11/2/2005 | 1413 | 28 25.50' | -96 15.55' | 19 | 10.6 | 6.7 | 6.7 | 6.2 | 30.8 | 30.8 | 31.4 | 22.3 | 22.2 | 23.2 | 1.334 | 0.000 | 0.244 | 10 | 15 | 73 | |
| 32008 | 11/2/2005 | 1444 | 28 24.52' | -96 15.50' | 19 | 12.1 | 6.8 | 6.7 | 6.6 | 31.0 | 31.0 | 31.6 | 22.5 | 22.4 | 22.4 | 1.736 | 0.066 | 0.804 | 10 | 17 | 99 | |
| 32009 | 11/21/2005 | 1000 | 28 18.43' | -96 20.45' | 19 | 15.5 | 6.5 | 6.5 | 6.2 | 31.1 | 31.2 | 31.5 | 19.8 | 19.8 | 20.5 | 0.607 | 0.010 | 0.070 | 10 | 13 | 54 | |
| 32010 | 11/21/2005 | 1035 | 28 18.45' | -96 18.45' | 19 | 17.0 | 6.6 | 6.6 | 6.0 | 31.3 | 32.2 | 31.7 | 19.9 | 19.9 | 21.3 | 0.399 | 0.035 | 0.125 | 10 | 8 | 53 | |
| 32011 | 11/21/2005 | 1107 | 28 16.47' | -96 17.50' | 19 | 19.2 | 6.5 | 6.4 | 6.1 | 30.9 | 31.8 | 32.6 | 20.4 | 20.7 | 21.6 | 0.629 | 0.008 | 0.089 | 10 | 8 | 45 | |
| 32012 | 11/21/2005 | 1147 | 28 15.47' | -96 20.40' | 19 | 18.8 | 6.6 | 6.4 | 6.1 | 31.8 | 31.9 | 32.7 | 20.7 | 20.7 | 31.7 | 1.017 | 0.238 | 0.045 | 10 | 9 | 38 | |
| 32013 | 11/21/2005 | 1224 | 28 12.47' | -96 20.45' | 19 | 21.6 | 6.5 | 6.4 | 6.1 | 32.5 | 32.9 | 33.4 | 21.3 | 21.5 | 21.8 | 0.229 | 0.001 | 0.015 | 10 | 7 | 12 | |
| 32014 | 11/21/2005 | 1316 | 28 11.48' | -96 26.48' | 19 | 18.2 | 6.6 | 6.4 | 6.2 | 32.0 | 32.7 | 32.6 | 20.9 | 21.3 | 21.3 | 0.155 | 0.025 | 0.142 | 10 | 7 | 38 | |
| 32015 | 11/21/2005 | 1349 | 28 13.50' | -96 27.52' | 19 | 14.9 | 6.4 | 6.3 | 6.0 | 31.4 | 31.5 | 32.3 | 20.3 | 20.4 | 21.2 | 0.231 | 0.012 | 0.062 | 10 | 10 | 34 | |
| 32016 | 11/21/2005 | 1425 | 28 16.57' | -96 25.50' | 19 | 12.4 | 6.8 | 6.8 | 6.6 | 30.8 | 30.8 | 30.9 | 18.6 | 18.6 | 18.1 | 0.495 | 0.031 | 0.346 | 10 | 11 | 66 | |
| 40 SABINE | | | | | | | | | | | | | | | | | | | | | | |
| 40001 | 11/3/2005 | 820 | 29 39.58' | -93 51.12' | 17 | 2.7 | 7.8 | 7.9 | 7.5 | 29.0 | 28.9 | 29.0 | 19.2 | 19.3 | 19.3 | 0.476 | 0.821 | 0.287 | 10 | 18 | 100 | |
| 40002 | 11/3/2005 | 906 | 29 36.50' | -93 52.78' | 17 | 5.8 | 7.6 | 7.4 | 6.6 | 28.8 | 28.8 | 29.0 | 19.4 | 19.4 | 19.7 | 0.440 | 0.023 | 0.971 | 10 | 17 | 56 | |
| 40003 | 11/3/2005 | 935 | 29 36.73' | -93 53.12' | 17 | 5.5 | 7.5 | 7.3 | 5.8 | 28.8 | 28.8 | 29.0 | 19.6 | 19.5 | 19.9 | 0.254 | 0.098 | 3.184 | 10 | 14 | 40 | |
| 40004 | 11/3/2005 | 1024 | 29 37.40' | -93 59.18' | 17 | 5.5 | 7.7 | 7.4 | 7.2 | 29.6 | 29.6 | 29.6 | 20.1 | 19.8 | 19.9 | 0.170 | 0.018 | 2.043 | 10 | 10 | 27 | |

Table 1. (cont.)

| STA# | DATE | | LAT | LONG | STAT ZONE | MAX DEPTH | D.O | | | SALINITY | | | TEMPERATUR | | | FIN CATCH | CRUS CATCH | OTHR CATCH | MIN FISHER | BIO COUNT | LENGTH COUNT | OP |
|-------------------|------------|------|-----------|------------|-----------|-----------|-----|-----|-----|----------|------|------|------------|------|------|-----------|------------|------------|------------|-----------|--------------|----|
| | MM/DD/YY | TIME | | | | | SUR | MID | MAX | SUR | MID | MAX | SUR | MID | MAX | | | | | | | |
| 40 SABINE (cont.) | | | | | | | | | | | | | | | | | | | | | | |
| 40005 | 11/3/2005 | 1053 | 29 36.55' | -94 00.77' | 17 | 6.7 | 7.8 | 7.6 | 6.8 | 29.0 | 29.7 | 29.9 | 20.6 | 20.1 | 20.4 | 0.176 | 0.000 | 0.125 | 10 | 13 | 24 | |
| 40006 | 11/3/2005 | 1131 | 29 38.53' | -94 03.23' | 17 | 4.8 | 7.8 | 7.7 | 7.5 | 29.7 | 29.7 | 29.7 | 20.6 | 20.1 | 20.1 | 0.628 | 0.058 | 0.057 | 10 | 10 | 35 | |
| 40007 | 11/3/2005 | 1246 | 29 34.42' | -93 56.75' | 17 | 8.8 | 7.6 | 7.2 | 5.7 | 29.4 | 29.4 | 30.5 | 20.9 | 19.8 | 20.7 | 2.940 | 0.087 | 0.169 | 10 | 20 | 103 | |
| 40008 | 11/3/2005 | 1323 | 29 33.55' | -93 54.25' | 17 | 10.6 | 7.6 | 6.4 | 6.5 | 29.1 | 30.6 | 31.7 | 20.3 | 20.9 | 21.4 | 1.312 | 0.000 | 0.315 | 10 | 10 | 75 | |
| 40009 | 11/20/2005 | 855 | 29 42.22' | -93 47.27' | 17 | 3.3 | 8.3 | 8.4 | 8.4 | 26.1 | 26.0 | 26.1 | 15.9 | 16.0 | 16.2 | 0.435 | 0.215 | 0.058 | 10 | 13 | 63 | |
| 40010 | 11/20/2005 | 922 | 29 41.80' | -93 47.88' | 17 | 3.3 | 8.5 | 8.4 | 8.3 | 26.1 | 26.1 | 26.3 | 16.0 | 16.1 | 16.2 | 0.328 | 0.165 | 0.063 | 10 | 12 | 60 | |
| 40011 | 11/20/2005 | 955 | 29 39.50' | -93 47.17' | 17 | 6.7 | 7.9 | 7.8 | 8.0 | 26.9 | 26.9 | 26.9 | 17.2 | 17.2 | 17.1 | 0.297 | 0.017 | 0.177 | 10 | 10 | 49 | |
| 40012 | 11/20/2005 | 1048 | 29 38.52' | -93 44.80' | 17 | 8.2 | 7.8 | 7.7 | 7.3 | 27.2 | 28.1 | 29.1 | 17.8 | 18.4 | 18.9 | 0.136 | 0.016 | 0.619 | 10 | 8 | 17 | |
| 40013 | 11/20/2005 | 1137 | 29 43.42' | -93 41.20' | 17 | 4.6 | 8.2 | 8.1 | 8.3 | 25.8 | 25.9 | 26.2 | 16.3 | 16.4 | 16.9 | 0.231 | 0.048 | 0.150 | 10 | 14 | 25 | |
| 40014 | 11/20/2005 | 1234 | 29 36.45' | -93 37.87' | 17 | 10.4 | 7.7 | 7.6 | 7.4 | 30.4 | 30.5 | 30.2 | 18.5 | 18.5 | 18.8 | 0.612 | 0.008 | 0.138 | 10 | 10 | 49 | |
| 40015 | 11/20/2005 | 1335 | 29 34.33' | -93 45.35' | 17 | 11.0 | 8.1 | 7.8 | 7.2 | 28.5 | 31.7 | 32.2 | 18.3 | 18.6 | 19.3 | 0.303 | 0.024 | 1.454 | 10 | 17 | 41 | |
| 40016 | 11/20/2005 | 1412 | 29 35.63' | -93 47.65' | 17 | 10.4 | 7.8 | 7.5 | 7.1 | 27.4 | 28.6 | 30.4 | 17.9 | 18.9 | 19.3 | 0.301 | 0.018 | 0.927 | 10 | 14 | 37 | |
| 67 NUECES | | | | | | | | | | | | | | | | | | | | | | |
| 67001 | 11/2/2005 | 802 | 27 50.18' | -97 59.65' | 20 | 11.6 | 6.5 | 6.5 | 6.5 | 28.6 | 30.0 | 30.8 | 21.6 | 21.6 | 21.6 | 0.326 | 0.040 | 1.726 | 10 | 11 | 59 | |
| 67002 | 11/2/2005 | 841 | 27 52.75' | -96 56.53' | 20 | 12.8 | 6.5 | 6.6 | 6.6 | 30.4 | 30.4 | 31.4 | 22.8 | 22.7 | 22.6 | 1.893 | 0.008 | 0.033 | 10 | 11 | 59 | |
| 67003 | 11/2/2005 | 915 | 27 54.25' | -96 54.62' | 20 | 13.4 | 6.6 | 6.7 | 6.6 | 30.7 | 30.7 | 30.9 | 22.9 | 22.9 | 22.8 | 1.202 | 0.007 | 0.068 | 10 | 10 | 58 | |
| 67004 | 11/2/2005 | 955 | 27 59.68' | -96 54.18' | 20 | 7.6 | 6.8 | 7.0 | 6.8 | 29.7 | 29.6 | 29.9 | 21.5 | 21.5 | 21.5 | 1.798 | 0.045 | 0.173 | 10 | 19 | 88 | |
| 67005 | 11/2/2005 | 1040 | 27 56.17' | -96 49.65' | 20 | 16.8 | 6.6 | 6.5 | 6.6 | 31.0 | 31.1 | 31.2 | 23.2 | 23.2 | 23.1 | 1.517 | 0.037 | 0.176 | 10 | 12 | 102 | |
| 67006 | 11/2/2005 | 1117 | 27 53.78' | -96 52.72' | 20 | 16.2 | 6.6 | 6.6 | 6.5 | 31.1 | 31.1 | 31.1 | 23.2 | 23.2 | 23.6 | 2.422 | 0.001 | 0.105 | 10 | 13 | 84 | |
| 67007 | 11/2/2005 | 1200 | 27 49.08' | -96 54.82' | 20 | 18.3 | 6.5 | 6.5 | 6.4 | 31.4 | 31.6 | 31.7 | 23.5 | 23.5 | 23.6 | 1.667 | 0.005 | 0.128 | 10 | 15 | 88 | |
| 67008 | 11/2/2005 | 1240 | 27 47.77' | -96 53.90' | 20 | 20.1 | 6.6 | 6.6 | 6.4 | 31.8 | 31.8 | 33.0 | 23.6 | 23.6 | 23.8 | 1.414 | 0.051 | 0.051 | 10 | 24 | 102 | |
| 67009 | 11/21/2005 | 734 | 27 47.67' | -96 58.48' | 20 | 16.5 | 6.9 | 6.9 | 6.8 | 31.9 | 31.9 | 31.8 | 20.5 | 20.5 | 20.5 | 1.499 | 0.017 | 0.112 | 10 | 10 | 52 | |
| 67010 | 11/21/2005 | 805 | 27 46.67' | -97 00.48' | 20 | 14.9 | 6.9 | 7.1 | 7.0 | 31.5 | 31.5 | 31.6 | 20.0 | 20.0 | 19.4 | 1.891 | 0.028 | 0.199 | 10 | 10 | 77 | |
| 67011 | 11/21/2005 | 837 | 27 43.77' | -97 00.45' | 20 | 17.4 | 7.0 | 6.9 | 6.8 | 31.8 | 31.8 | 32.0 | 20.4 | 20.5 | 20.6 | 0.454 | 0.035 | 0.103 | 10 | 16 | 39 | |
| 67012 | 11/21/2005 | 907 | 27 42.05' | -97 00.43' | 20 | 18.6 | 6.7 | 6.8 | 6.7 | 32.4 | 32.4 | 32.5 | 21.4 | 21.4 | 21.3 | 0.224 | 0.001 | 0.130 | 10 | 10 | 33 | |
| 67013 | 11/21/2005 | 939 | 27 40.78' | -97 03.43' | 20 | 15.8 | 6.9 | 6.7 | 6.7 | 32.0 | 31.9 | 31.9 | 20.7 | 20.7 | 21.4 | 0.021 | 0.000 | 0.009 | 10 | 5 | 7 | |
| 67014 | 11/21/2005 | 1009 | 27 38.02' | -97 02.28' | 20 | 19.8 | 6.8 | 7.0 | 6.6 | 32.9 | 33.0 | 33.1 | 21.8 | 21.8 | 21.9 | 1.234 | 0.018 | 0.006 | 10 | 11 | 57 | |
| 67015 | 11/21/2005 | 1037 | 27 36.75' | -97 01.50' | 20 | 21.3 | 6.9 | 6.7 | 6.7 | 33.3 | 33.3 | 33.4 | 22.2 | 22.2 | 22.2 | 0.315 | 0.032 | 0.052 | 10 | 12 | 47 | |
| 67016 | 11/21/2005 | 1121 | 27 41.18' | -96 58.58' | 20 | 21.3 | 7.0 | 7.0 | 6.7 | 32.7 | 32.7 | 32.7 | 21.8 | 21.8 | 21.9 | 0.304 | 0.013 | 0.150 | 10 | 9 | 43 | |
| 69 SAN JACINTO | | | | | | | | | | | | | | | | | | | | | | |
| 69001 | 11/13/2005 | 1202 | 29 13.44' | -94 43.88' | 18 | 12.0 | 7.1 | 7.0 | 7.0 | 29.8 | 30.5 | 31.2 | 23.8 | 23.1 | 22.8 | 0.382 | 0.178 | 0.233 | 10 | 13 | 50 | |
| 69002 | 11/13/2005 | 1239 | 29 12.83' | -94 42.39' | 18 | 13.0 | 6.9 | 6.3 | 6.5 | 29.8 | 31.2 | 35.6 | 24.0 | 22.9 | 22.9 | 0.488 | 0.109 | 0.095 | 10 | 20 | 64 | |
| 69003 | 11/13/2005 | 1320 | 29 12.23' | -94 46.87' | 18 | 11.0 | 7.0 | 6.8 | 6.5 | 29.6 | 29.5 | 31.5 | 24.0 | 23.2 | 23.1 | 0.428 | 0.102 | 0.540 | 10 | 18 | 71 | |
| 69004 | 11/13/2005 | 1405 | 29 08.85' | -94 47.44' | 18 | 15.0 | 7.0 | 7.0 | 6.7 | 31.2 | 31.7 | 32.6 | 23.9 | 23.8 | 23.2 | 1.084 | 0.169 | 0.064 | 10 | 15 | 86 | |
| 69005 | 11/13/2005 | 1443 | 29 07.22' | -94 47.94' | 18 | 16.0 | 7.1 | 6.2 | 6.3 | 29.6 | 31.9 | 32.4 | 24.3 | 23.4 | 23.0 | 1.152 | 0.395 | 0.220 | 10 | 19 | 104 | |
| 69006 | 11/13/2005 | 1531 | 29 12.93' | -94 52.28' | 18 | 8.6 | 7.1 | 6.9 | 7.1 | 29.5 | 29.4 | 29.6 | 24.3 | 24.3 | 24.1 | 0.911 | 0.254 | 1.139 | 10 | 16 | 66 | |
| 69007 | 11/13/2005 | 1602 | 29 14.38' | -94 49.74' | 18 | 7.9 | 7.0 | 7.1 | 6.8 | 29.3 | 29.3 | 29.5 | 24.2 | 24.2 | 23.5 | 0.273 | 0.046 | 0.665 | 10 | 12 | 63 | |
| 69008 | 11/13/2005 | 1637 | 29 16.91' | -94 46.18' | 18 | 6.4 | 7.1 | 7.0 | 6.9 | 29.4 | 29.4 | 29.5 | 24.3 | 24.1 | 23.9 | 0.214 | 0.001 | 0.116 | 10 | 7 | 50 | |
| 69009 | 11/29/2005 | 1028 | 29 11.13' | -94 40.72' | 18 | 15.0 | 6.8 | 6.8 | 6.8 | 32.2 | 32.3 | 32.3 | 18.7 | 18.6 | 18.7 | 0.995 | 0.409 | 0.077 | 10 | 18 | 130 | |
| 69010 | 11/29/2005 | 1109 | 29 10.77' | -94 40.27' | 18 | 15.0 | 6.7 | 6.7 | 6.6 | 33.2 | 32.3 | 32.3 | 18.6 | 18.6 | 18.7 | 0.623 | 0.135 | 0.030 | 10 | 15 | 80 | |
| 69011 | 11/29/2005 | 1157 | 29 12.12' | -94 38.68' | 18 | 15.0 | 6.4 | 6.4 | 6.4 | 32.2 | 32.1 | 32.2 | 18.3 | 18.3 | 18.6 | 0.720 | 0.106 | 0.110 | 10 | 19 | 101 | |
| 69012 | 11/29/2005 | 1244 | 29 15.77' | -94 37.15' | 18 | 13.0 | 6.5 | 6.4 | 6.3 | 32.1 | 31.2 | 32.1 | 18.5 | 18.7 | 18.6 | 0.893 | 0.644 | 0.017 | 10 | 13 | 103 | |

Table 1. (cont.)

| STA# | DATE | | LAT | LONG | STAT ZONE | MAX DEPTH | D.O | | | SALINITY | | | TEMPERATUR | | | FIN CATCH | CRUS CATCH | OTHR CATCH | MIN FISHED | BIO COUNT | LENGTH COUNT | OP |
|------------------------|------------|------|-----------|------------|-----------|-----------|-----|-----|-----|----------|------|------|------------|------|------|-----------|------------|------------|------------|-----------|--------------|----|
| | MM/DD/YY | TIME | | | | | SUR | MID | MAX | SUR | MID | MAX | SUR | MID | MAX | | | | | | | |
| 69 SAN JACINTO (cont.) | | | | | | | | | | | | | | | | | | | | | | |
| 69013 | 11/29/2005 | 1355 | 29 23.35' | -94 28.65' | 18 | 11.0 | 6.3 | 6.3 | 6.2 | 31.7 | 31.7 | 31.6 | 18.4 | 18.4 | 18.3 | 0.874 | 0.039 | 0.322 | 10 | 18 | 91 | |
| 69014 | 11/29/2005 | 1434 | 29 24.72' | -94 30.12' | 18 | 10.0 | 6.3 | 6.3 | 6.3 | 31.5 | 31.6 | 31.6 | 18.4 | 18.3 | 18.3 | 0.529 | 0.447 | 0.089 | 10 | 17 | 128 | |
| 69015 | 11/29/2005 | 1510 | 29 26.10' | -94 32.80' | 18 | 8.6 | 6.4 | 6.4 | 6.3 | 31.6 | 31.6 | 31.5 | 18.3 | 18.4 | 18.4 | 0.353 | 0.194 | 0.075 | 10 | 15 | 84 | |
| 69016 | 11/29/2005 | 1543 | 29 26.80' | -94 33.10' | 18 | 7.6 | 6.5 | 6.3 | 6.4 | 31.6 | 31.6 | 31.6 | 18.2 | 18.4 | 18.3 | 0.343 | 0.217 | 0.947 | 10 | 17 | 84 | |

Data transfer summary: number of observations in each table.

| | | | | |
|--------------|---------------|------------------|----------------------|--|
| Station Card | Environmental | Biological Index | General Length Freq. | Submitted by: Paul Choucair |
| 80 | 80.0 | 1008 | 4895 | Date submitted: Thursday, February 23, 2006 |