BIOLOGY AND ECOLOGY

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-415

DATA INVENTORY INFORMATION
GBNEP Reference Number: LIT0001

PROJECT NAME: Fish 19th Century
OBJECTIVE: Survey fishery in Galveston Bay in late 19th Century
DATA USE: survey
PRIORITY PROBLEM:
C2. Fisheries depletion
KEYWORDS: Fishery, fish

SOURCE: Jordan and Gilbert (1882)

CONTACT: No way

GENERAL TYPE: Fish descriptions

GEOGRAPHICAL COVERAGE: Galveston Bay (no further specificity)

PERIOD OF COVERAGE: late 19th century

MEASUREMENTS: see below

FORMAT: text

COMMENTS: Principally descriptions of fish species, both taken by the researchers and from communication with coastal fishermen. No quantitative data, but some qualitative indications of populations, e.g. "abundant","common", "rare". Of principal value as historical reference on occurrence of fish in the Bay system.

Published in:

Jordan, D.S. and C.H.Gilbert, 1882: Notes on fishes observed about Pensacola, Florida and Galveston, Texas with description of new species. Proceedings of U.S. National Museum. (UT Library collection)

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-420

DATA INVENTORY INFORMATION
GBNEP Reference Number: SVS0001

PROJECT NAME: Fishery 1890
OBJECTIVE: survey fishery in Bay in 1890
DATA USE: survey
PRIORITY PROBLEM:
C2. Fisheries depletion
KEYWORDS: fish, fishery, economics, demography

SOURCE: Stevenson (1893)

CONTACT:

GENERAL TYPE: biology, economics, anecdotal

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: ca. 1890, with references to earlier years

MEASUREMENTS: methods and economics of various fisheries

FORMAT: textual and tabular

COMMENTS:

Published in:

Stevenson, Charles, 1893: Report on the Coastal Fisheries of Texas. Report 3, Part XVII, Report of the Commissioner for 1889-1891, U.S. Commission of Fish and Fisheries, GPO, Washington, D.C., pp 372-420.

Includes line-drawing plates of the principal fish. Good summary of the practices of commercial fishing in the area in the late 19th century.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-425

DATA INVENTORY INFORMATION
GBNEP Reference Number: USBF001

PROJECT NAME: Fishery 1928
OBJECTIVE: General operation & catch of fishery in late 1920s
DATA USE: survey
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A1. Loss of habitat
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: fish, economics, shrimp

SOURCE: U.S. Bureau of Fisheries, Fiedler (1929)

CONTACT:

GENERAL TYPE: Economic

GEOGRAPHICAL COVERAGE: Texas Coast, including Galveston Bay

PERIOD OF COVERAGE: 1928

MEASUREMENTS: Data on catch by species, catch by gear, operating units (vessels, gear) by county, number of fishermen, size of vessels, etc.

FORMAT: tabular

COMMENTS:

Published as:

Fiedler, R.H. , 1929: Fishery industries of the United States, 1929. Fish. Doc. 1095, App. XIV to Report of Commissioner of Fisheries for FY 1930, U.S. GPO, Washington, D.C., [1931].

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-430

DATA INVENTORY INFORMATION
GBNEP Reference Number: LIT05
PROJECT NAME: Whitten 1950 jetties
OBJECTIVE: survey jetty fauna
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
D4. Use of littoral property
KEYWORDS: jetties, ecology, crustaceans

SOURCE: Whitten et al. (1950), Marine Science Institute, UT

CONTACT:

GENERAL TYPE: Biological

GEOGRAPHICAL COVERAGE: North and South Jetties

PERIOD OF COVERAGE: Summers, 1938-40, 1946-47

MEASUREMENTS: Observations of fauna inhabiting jetty habitat

FORMAT: species lists

COMMENTS: While presented on a generalized level, i.e. a survey of the principal jetty systems of the Texas coast, this study documents the life forms inhabiting the jetty area of Bolivar Roads. Notes indicate many of the specimens had been lost by 1950, and that this was "part of a general and intensive biological and hydrographic survey of the western gulf which was originally suggested and planned by E.J. Lund, Director of the Institute of Marine Science form its inception to September 1949."

Published as:

Whitten, H., H.F. Roasene and J. Hedgpeth, 1950: The invertebrate fauna of Texas coast jetties; a preliminary survey. *Publ. Inst. Mar. Sci. 1* (2), 53-87.

Whitten, H., 1940: Marine biology of the government jetties in the Gulf of Mexico bordering the Texas Coast. M.A. Thesis, UT at Austin.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-435

DATA INVENTORY INFORMATION
GBNEP Reference Number: UTMA002

PROJECT NAME: Galveston vegetation
OBJECTIVE: survey vegetation communities & soil controls
DATA USE: survey
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A1. Loss of habitat
A7. Increased sediment/turbidity
D3. Loss of wetlands
D4. Use of littoral property
KEYWORDS: biology, ecology, vegetation, cordgrass, soils

SOURCE: University of Texas

CONTACT: Library

GENERAL TYPE: Biology, Vegetation

GEOGRAPHICAL COVERAGE: Galveston County (terrestrial)

PERIOD OF COVERAGE: Ca. 1942

MEASUREMENTS: Species lists and occurrence of dominants according to soil types

FORMAT: tabular, textual

COMMENTS:

Published as:

Nelson, Allie F., 1942: The vegetation of Galveston County. M.A. Thesis, University of Texas at Austin

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-440

DATA INVENTORY INFORMATION
GBNEP Reference Number: MBUT001

PROJECT NAME: Offatts Bayou 1949
OBJECTIVE: determine reasons for fish kills
DATA USE: research
PRIORITY PROBLEM:
A6. Contamination
B2. Contamination of water/sediment
B3. Restriction of contact recreation
C2. Fisheries depletion
KEYWORDS: zooplankton, red tide, fish kills, plankton

SOURCE: Medical Branch, University of Texas, Galveston, Connell and Cross (1950)

CONTACT:

GENERAL TYPE: Plankton, red tide, water quality, anecdotal

GEOGRAPHICAL COVERAGE: Offatts Bayou, West Bay

PERIOD OF COVERAGE: ca. July 1949

MEASUREMENTS: *Gonyaulax* concentration, BOD, salinity (as % NaCl), dissolved oxygen (as % saturation), volatile suspended solids

FORMAT: Graphical

COMMENTS: Re-examination of summer mortality in Offatts Bayou, hypothesizing red tide organism *Gonyaulax* as causative agent, through depletion of dissolved oxygen. This asserts to be "first reported observation of the concurrent appearance of a red tide, luminescent water, and immense numbers of the dinoflagellate protozoan, *Gonyaulax,* with mass mortality of fish on the eastern coast of North America." States that nearby residents have reported appearance of red tides for "almost every summer during the past 15-20 years." Data from four nearshore stations given.

Connell, C.H. and J.B. Cross, 1950: Mass mortality of fish associated with the protozoan Gonyaulax in the Gulf of Mexico. *Science, 112* (September), pp 359-363.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-445

DATA INVENTORY INFORMATION
GBNEP Reference Number: UHSAS001

PROJECT NAME: Brays Bayou diatoms 53
OBJECTIVE: Determine diatom populations and water quality
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
B2. Contamination of water/sediment
D3. Loss of wetlands
KEYWORDS: Brays Bayou, Houston Ship Channel, algae, phytoplankton

SOURCE: School of Arts and Sciences, University of Houston

CONTACT:

GENERAL TYPE: Biology, water quality - diatoms

GEOGRAPHICAL COVERAGE: Bray's Bayou and vicinity (including locations on U. of H. campus)

PERIOD OF COVERAGE: February 28, 1953 to June 4, 1953

MEASUREMENTS:

Chlorides analyzed in first four stations using method of Theroux, Eldridge, and Mallman (1943) (this abstract does not contain full reference)
Specimen collections were made at the other eight stations and the forms of diatoms noted
Temperature and pH noted at most stations

FORMAT: Tabular

COMMENTS:

Published in:

Powell, Robert William Jr., 1953: Diatoms of Bray's Bayou, Houston, Texas, M.S. Thesis abstract, University of Houston

STATION LOCATIONS:
12 locations total

stations	1 - 5 &10:	along 500 ft. reach of Bray's Bayou southeast of the University of Houston campus
	6 - 9:	within 600 ft. of Bayou in tributaries and nearby pools of water
	11 & 12:	pools of water on U.H. campus, within 3/4 mile from Bray's Bayou

Station 9 is the most centrally located station, at
latitude: 29 deg 42.85 min longitude: 95 deg 20.08 min.

All of the other stations are within a mile of number 9.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-450

DATA INVENTORY INFORMATION
GBNEP Reference Number: PANS001

PROJECT NAME: Diatoms, 1954
OBJECTIVE: Examine distribution of diatoms using Catherwood diatometers
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
A3. Alteration of nutrients
C2. Fisheries depletion
KEYWORDS: plankton, diatoms, diatometers

SOURCE: Philadelphia Academy of Natural Sciences, Hohn (1959)

CONTACT: Roger L. Thomas, Ph.D.
Patrick Center for Environmental Research
The Academy of Natural Sciences of Philadelphia
19th & The Parkway
Logan Square
Philadelphia, PA 19103

GENERAL TYPE: Diatoms

GEOGRAPHICAL COVERAGE: Houston Ship Channel, Upper Galveston Bay, Chocolate Bayou and Mustang Bayou

PERIOD OF COVERAGE: 29 June - August 10, 1954

MEASUREMENTS: Population statistics from installed Catherwood Diatometers. Two diatometers installed per station at about 37 stations. Much vandalism suffered in West Bay and Texas City areas. Biological surveys conducted the last week of July, including: algae and protozoa; invertebrates by nets, seines and dredging; fish by 25-foot bag seine and 6-foot shrimp trawl. All specimens returned to Academy.

FORMAT: Graphical in Hohn(1959). Tabular in Patrick and Hohn (1955), only by gross taxa (e.g. total fish) and by species list.

COMMENTS: Published in:

Hohn, Matthew, H., 1959: The use of diatom populations as a measure of water quality in selected areas of Galveston and Chocolate Bay, Texas. *Publ. Inst. Mar. Sci. 6*, pp 206-212.

More detail is available in the PAS file report:

Patrick, Ruth & Matthew Hohn, 1955: Catherwood diatometer studies in the Galveston Bay area of Texas. Report for the American Petroleum Institute, Limnology Department Reading Room, Academy of Natural Sciences of Philadelphia, Philadelphia.

There is a qualitative description of Channel and Bay conditions current as of 1954. Not all stations have information reported. Further there is no hydrographic or quality data presented. According to Thomas, all of this information plus the original samples are lost. The diatom results are discussed only for 3 stas in Houston Ship Channel, 1 station in upper Galveston Bay, 1 sta in Chocolate Bay, and 1 sta in Mustang Bayou.

Approximate stations locations listed in Hohn (1959):

Station	*Latitude*	*Longitude*	*Description*
1	29° 44	95° 06	Houston Ship Channel near Fl "70", 2.5 mis upstream from Monument
2	29° 36	95° 57	Galv Bay, near Fl "66" at southern tip Atkinson Island (Five Mile Pass)
3	29° 12	95° 07	Mustang Bayou, 200 yds from mouth at Chocolate Bay
4	29° 12	95° 11	Near Buoy "22" in Chocolate Bay, 1.5 mis west of Horse Grove Point

NOTE: These are navigation references as of 1954. Numbers are changed from time to time, and these may not agree with later navigation charts. -GHW

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-452

DATA INVENTORY INFORMATION
GBNEP Reference Number: USBCF002

PROJECT NAME: Clear Lake Chin 58-59
OBJECTIVE: One-year survey fish & shellfish
DATA USE: research
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A1. Loss of habitat
A3. Alteration of nutrients
C2. Fisheries depletion
KEYWORDS: shrimp, fish, ecology, bait shrimp

SOURCE: Bureau of Commercial Fisheries, Chin (1961)

CONTACT: National Marine Fisheries Service
4700 Ave. U
Galveston, TX 77551

(409)-766-3500.

GENERAL TYPE: Biology, water quality

GEOGRAPHICAL COVERAGE: Clear Lake

PERIOD OF COVERAGE: 13 January 1958 - 28 January 1959, weekly

MEASUREMENTS: Otter trawl (try net) hauls at each station, distance of 1100 feet, organisms speciated, counted, measured and weighed. In all 363 samples, three species of invertebrate collected (brown and white shrimp, and blue crab), and 43 species of fish. At each station, *near-bottom* salinity and temperature were measured. Salinity measured by hydrometer in water sample obtained by hand or by Kemmerer. Temperature measured by Whiteney Thermistor probe and readout.

FORMAT: Tabular and graphical

COMMENTS: The original biological data appears to be lost. The dissertation, Chin (1961), contains derivative information, e.g. abundance as function of size distribution and season. The raw temperature and salinity measurements are presented in Chin (1961) as Tables 3 and 4.

Published as:

Chin, Edward, 1960: The bait shrimp industry of Galveston Bay. *Trans. Am. Fish. Soc. 89* (2), 135-141.

Chin, Edward, 1961: A trawl study of an estuarine nursery area in Galveston Bay, with particular reference to penaeid shrimp. Ph.D. thesis, Zoology, University of Washington.

STATION LOCATIONS:

Station Number	*Location/ Description*	*Latitude.*		*Longitude*	
		Deg	*Min*	*Deg*	*Min*
B	Mud Lake, south end	29	33.92	95	04.30
C	Taylor Lake, south end	29	33.25	95	03.23
D	Clear Creek, head of the lake	29	32.00	95	05.50
E	Clear Lake, near north shore	29	33.73	95	03.83
F	Clear Lake, in channel, near south shore	29	33.30	95	03.63
G	Clear Lake, near south shore out from Glen Cove	29	33.08	95	02.83
H	Clear Lake, south shore, mouth of Jarbo Bayou	29	32.87	95	02.32
J	Inlet to Clear Lake, near west end	29	33.00	95	01.72

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-460

DATA INVENTORY INFORMATION
GBNEP Reference Number: LIT0008

PROJECT NAME: Oyster shell 1961
OBJECTIVE: Chemical composition of oyster shell
DATA USE: research
PRIORITY PROBLEM:
C2. Fisheries depletion
KEYWORDS: Oyster, chemistry, contaminants

SOURCE: Dow Chemical, Freeport

CONTACT:

GENERAL TYPE: Oyster shell analysis

GEOGRAPHICAL COVERAGE: Red Fish Bar

PERIOD OF COVERAGE: ca. 1961

MEASUREMENTS: Chemical analysis of oyster shell into 41 constituents: Calcium (CaO), Carbon (CO2), Sodium (Na2O), Magnesium (MgO), Sulfur (SO3), Silicon (SiO2), water (H2O), plus metals.

FORMAT: Tabular

COMMENTS: Shell taken from Red Fish Bar, roughly 29° 30, 94° 50, for analysis, from commercially dredged reef ("non-living").

Published in:

Smith, R.A. and E.R. Wright, 1962: Elemental composition of oyster shell. *Texas Journal of Science 14* (2), 222-224.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-465

DATA INVENTORY INFORMATION
GBNEP Reference Number: MTPW001

PROJECT NAME: Red drum 62-75
OBJECTIVE: ecology & response of red drum to hydrography
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
A3. Alteration of nutrients
A4. Bathymetric/circulation changes
C2. Fisheries depletion
C3. Marine Debris
KEYWORDS: ecology, fish, red drum

SOURCE: Matlock (1987), Texas Parks and Wildlife Dept.

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704

512-448-4313

GENERAL TYPE: Biology, hydrography: fish response to hydrography

GEOGRAPHICAL COVERAGE: Galveston Bay (averaged over entire bay)

PERIOD OF COVERAGE: 1962-75, annual averages

MEASUREMENTS: Salinities averaged over bay and year, bag seine and trammel net collections similarly averaged

FORMAT: Graphical

COMMENTS: Analysis of data from TPWD programs, specifically to display the influence of hurricane events on red drum populations (which is dramatic in the Laguna Madre, but obscure in Galveston Bay, probably because the salinity fluctuates widely due to other factors as well, while in the Laguna the principal freshwater variation is due to hurricanes).

Matlock, G.C., 1987: The role of hurricanes in determining year-class strength of red drum. *Contr. Mar. Sci., 30*, pp 39-47.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-470

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0006

PROJECT NAME: Wood shrimp & hydrography 63-64
OBJECTIVE: ecology of grass shrimp
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: shrimp, ecology, salinity

SOURCE: Dept of Wildlife Management, Texas A&M

CONTACT:

GENERAL TYPE: Biological and hydrographic

GEOGRAPHICAL COVERAGE: 10 shore zone stations, periphery of Galveston Bay exclusive of West Bay

PERIOD OF COVERAGE: March 1963 - February 1964, monthly

MEASUREMENTS: Near - surface salinity from titration of chlorinity, and temperature, grass shrimp (*Palemonetes pugio*) by push net.

FORMAT: Tabular

COMMENTS: Published in masters thesis: Wood, Carl E. (1965), The effects of environmental factors on certain aspects of the biology of the grass shrimp, *Palemonetes pugio*, in the shore zone of the Galveston Bay estuarine system.

Although these data were taken in cooperation with USBCF Galveston Lab, the sample stations and sampling dates do not coincide with the Trent-Pullen collections of this period, so these are independent data.

Sample dates:

23 Mar 63	14 Sep
26 Apr	19 Oct
1 Jun	23 Nov
6 Jul	28 Dec
10 Aug	25 Jan 64
	23 Feb

STATION LOCATIONS

Station	*Description*	*Latitude*	*Longitude*
1	Mouth of East Lagoon, Bolivar Roads @ S. Jetty	29° 20.11	94° 45.00
2	Bolivar Peninsula at GIWW	29° 26.15	94° 42.31
3	Inside Rollover, GIWW near Faggards Slip	29° 31.0	94° 29.5
4	East Bay, North shore, canal on USFWS refuge	29° 34.0	94° 35.0
5	Smith Point, NW tip	29° 32.5	94° 47.3
6	Trinity Bay, Trin Riv Channel at Double Bayou	29° 39.0	94° 42.0
7	Trinity Bay, Trin Riv Ch, out from Anahuac	29° 45.0	94° 41.5
8	Trinity River, IH 10 crossing	29° 50.2	94° 45.8
9	Trinity Bay, north shore, McCollum Park	29° 45.6	94° 49.7
10	Trinity Bay, Houston Point, Standard Oil sta.	29° 39.5	94° 55.0
11	Upper Galv Bay at Surf Oak Bayou	29° 35.3	94° 59.5
12	Dickinson Bay, April Fool Point	29° 28.3	94° 55.5
13	West shore Galv Bay, 0.5 mi S of Texas City Dump	29° 24.5	94° 53.0

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-475

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD001F

PROJECT NAME: TPWD shrimp 60's
OBJECTIVE: Monitor seasonal and interbay abundance
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: shrimp, recruitment

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704

512-448-4313

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: 1963-70

MEASUREMENTS: Seines & trawls, shrimp speciation, details in publication

FORMAT: tabular

COMMENTS: Published in:

Moffett, A.W., 1964: A study of the Texas Shrimp Populations. Project MS-R-5, Coastal Fisheries Project Reports 63, TPWD, Austin.

Moffett, A.W., 1964: A study of the Texas Shrimp Populations. Project MS-R-5, Coastal Fisheries Project Reports 63, TPWD, Austin.

Moffett, A.W., 1965: A study of the Texas shrimp populations. Project MS-R-7, Coastal Fisheries Project Reports 1965, TPWD, Austin.

Compton, Henry, 1965: A survey of shrimp populations in the inshore Gulf of Mexico off Texas. Proj. No. MS-R-7, Coastal Fisheries Project Reports 1965, TPWD, Austin.

Moffett, A.W., 1966: A study of commercial shrimps in coastal bays of Texas. Project MS-R-8, Coastal Fisheries Project Reports 1966, TPWD, Austin.

Moffett, A.W., 1967: A study of commercial shrimps in coastal bays of Texas, 1967. Project MS-R-9, Coastal Fisheries Project Reports 1967, TPWD, Austin.

Moffett, A.W., 1968: A study of commercial shrimps in coastal bays of Texas, 1968. Project MS-9-10 [*sic*], Coastal Fisheries Project Reports 1968, TPWD, Austin.

Moffett, A.W., 1970: A study of commercial shrimps in coastal bays of Texas, 1969. Project MS-9-11 [*sic*], Coastal Fisheries Project Reports 1969-70, TPWD, Austin.

Moffett, A.W., 1970: A study of commercial shrimps in coastal bays of Texas, 1970. Project MS-R-12, Coastal Fisheries Project Reports 1969-70, TPWD, Austin.

Seasonal data and inter-bay comparisons are presented graphically and in tabular form, as aggregated and statistical data. The raw data have apparently been lost, but there is a remote possibility the data may be stored in the TPWD warehouse at Olmeto. If so, this data will be disorganized and undocumented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-480

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAES001

PROJECT NAME: Parker shrimp survey 63-64
OBJECTIVE: Study distribution & ecology of brown shrimp
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
A3. Alteration of nutrients
A6. Contamination
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: shrimp, ecology

SOURCE: Texas Agricultural Extension Service, Texas A&M Univ., Parker (1970)

CONTACT:

GENERAL TYPE: Shrimp trawls and hydrography

GEOGRAPHICAL COVERAGE: Galveston Bay, exclusive of West Bay

PERIOD OF COVERAGE: Jan 1963-Feb 64 twice monthly, Mar 64 - Dec 64, monthly

MEASUREMENTS: Bottom salinity, with Industrial Inst. RS-5 portable salinometer checked versus Knudsen titration, brown shrimp counts, total weight and sample lengths.

FORMAT: graphical

COMMENTS: No raw data are presented, only in Parker (1970) isopleth maps of relative abundance for the entire system and in Parker (1965) statistical relations. The 65 stations occupied are exactly a subset of those occupied in the Trent-Pullen surveys of the U.S. Bureau of Commercial Fisheries, and it may be that the shrimp data was included in the data set of the USBCF.

Parker shrimp survey 63-64

Published in:

Parker, Jack C., 1965: A study of the distribution and condition of brown shrimp in the primary nursery areas of the Galveston Bay system, Texas. M.S. Thesis, Texas A&M University.

_____, 1970: Distribution of juvenile brown shrimp (*Penaeus aztecus* Ives) in Galveston Bay, Texas, as related to certain hydrographic features and salinity. *Contr. Mar. Sci. 15*, 1-12.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-485

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD016

PROJECT NAME: TPWD fish 60's
OBJECTIVE: Monitor seasonal and interbay abundance
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: fish, ecology

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704
512-448-4313

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: 1963-70

MEASUREMENTS: Nets, seines & trawls, speciation, some special measurements, details in publication

FORMAT: tabular, graphical

COMMENTS: Published in:

Breuer, J.P., 1964: Coordination of coastwide fin-fish investigations project. Project MF-R-5, Coastal Fisheries Project Reports 63, TPWD, Austin.

More, Bill, 1964: Population studies of sports & commercial fin-fish & forage species of the Galveston Bay system. Project MF-R-5, Coastal Fisheries Project Reports 63, TPWD, Austin.

Breuer, J.P., 1965: Analysis of populations of sports and commercial fin-fish in the coastal bays of Texas. Project MF-R-7, Coastal Fisheries Project Reports 1965, TPWD, Austin.

Compton, Henry, 1965: A survey of fish populations in the inshore Gulf of Mexico off Texas. Project MF-R-7, Coastal Fisheries Project Reports 1965, TPWD, Austin.

Breuer, J.P., 1966: Analysis of populations of sports and commercial fin-fish in the coastal bays of Texas. Project MF-R-7, Coastal Fisheries Project Reports 1966, TPWD, Austin.

Breuer, J.P., 1967: Analysis of populations of sports and commercial fin-fish in the coastal bays of Texas. Project MF-R-9, Coastal Fisheries Project Reports 1967, TPWD, Austin.

Breuer, J.P., 1968: Analysis of populations of sports and commercial fin-fish in the coastal bays of Texas. Project MF-R-10, Coastal Fisheries Project Reports 1968, TPWD, Austin.

Benefield, R.L., 1970: A study of sand seatrout (*Cynoscion arenarius* Ginsburg) of the Galveston Bay area. Project 4-1400-CF-3-1, Coastal Fisheries Project Reports 1969-70, TPWD, Austin.

Seasonal data and inter-bay comparisons are presented graphically and in tabular form, as aggregated and statistical data. The study by Benefield (1970) includes stomach content analysis and electrophoresis analysis of hemaglobin protein from sand seatrout. The raw data have apparently been lost, but there is a remote possibility the data may be stored in the TPWD warehouse at Olmeto. If so, this data will be disorganized and undocumented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-490

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD013

PROJECT NAME: TPWD crab 60's
OBJECTIVE: Monitor seasonal and interbay abundance
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: fish, ecology

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704
512-448-4313

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: 1963-68

MEASUREMENTS: Seines & trawls, speciation & measurements, tagging, details in publication

FORMAT: tabular, graphical

COMMENTS: Published in:

Childress, U.R., 1964: Coordination of blue crab studies of the Texas coast. Project MC-R-2, Coastal Fisheries Project Reports 63, TPWD, Austin.

Moffett, A. W., and More, W.R., 1964: Population studies of the blue crabs of the Galveston Bay system. Project MC-R-2, Coastal Fisheries Project Reports 63, TPWD, Austin.

More, W.R., 1965: A study of the blue crab in Texas. Proj. No. MC-R-5, Coastal Fisheries Project Reports 1965, TPWD, Austin.

More, W.R., 1966: Studies of the blue crab in Texas. Proj. No. MC-R-6, Coastal Fisheries Project Reports 1966, TPWD, Austin.

Benefield, R.L., 1968: Survey of the blue crab (*Callinectes sapidus* Rathbun) sport fishery of the Galveston Bay system 1968. Coastal Fisheries Project Reports 1968, Texas Parks & Wildlife Dept., Austin.

Seasonal data and inter-bay comparisons are presented graphically and in tabular form, as aggregated and statistical data. The raw data have apparently been lost, but there is a remote possibility the data may be stored in the TPWD warehouse at Olmeto. If so, this data will be disorganized and undocumented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-495

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD018

PROJECT NAME: TPWD oysters 60's
OBJECTIVE: Monitor seasonal and interbay abundance
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: oysters, ecology

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704
512-448-4313

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: 1963-70

MEASUREMENTS: Dredging, tonging, hand-collection, details in publication

FORMAT: tabular

COMMENTS: Published in:

Hofstetter, R. P., 1964: A summary of oyster studies along the Texas coast. MO-R-5, Coastal Fisheries Project Reports 63, TPWD, Austin.

Hofstetter, R. P., 1965: Study of the oyster (*Crassostrea virginica*) population along the Texas coast. Project MO-R-7, Coastal Fisheries Project Reports 1965, TPWD, Austin.

Hofstetter, R. P., T.L. Heffernan & B.D. King, 1965: Oyster (*Crassostrea virginica*) mortality studies along the Texas coast. Project MO-R-7, Coastal Fisheries Project Reports 1965, TPWD, Austin.

Hofstetter, R. P., 1966: Oyster mortality studies along the Texas coast. Project MO-R-8, Coastal Fisheries Project Reports 1966, TPWD, Austin.

Hofstetter, R. P., 1966: Study of the oyster population on public reefs in Galveston Bay during 1966. Project MO-R-8, Coastal Fisheries Project Reports 1966, TPWD, Austin.

Hofstetter, R. P., 1967: Oyster studies along the Texas coast: 1967. Project MO-R-9, Coastal Fisheries Project Reports 1967, TPWD, Austin.

Hofstetter, R. P., 1968: Oyster studies along the Texas coast: 1968. Project MO-R-10, Coastal Fisheries Project Reports 1968, TPWD, Austin.

Hofstetter, R. P., 1970: Oyster studies 1969. Project MO-R-11, Coastal Fisheries Project Reports 1969-70, TPWD, Austin.

Hofstetter, R. P., 1970: Oyster studies 1970. Project CO-2-1, Coastal Fisheries Project Reports 1969-70, TPWD, Austin.

Seasonal data, including spat, and inter-bay comparisons are presented graphically and in tabular form, as aggregated and statistical data. The raw data have apparently been lost, but there is a remote possibility the data may be stored in the TPWD warehouse at Olmeto. If so, this data will be disorganized and undocumented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-500

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD012

PROJECT NAME: TPWD quahogs 65
OBJECTIVE: Study growth & mortality
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: clams, ecology

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704
512-448-4313

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: West Bay, Galveston Bay

PERIOD OF COVERAGE: 1965

MEASUREMENTS: Natural occurrence, survival in transplanted trays

FORMAT: tabular, graphical

COMMENTS: Published in:

Hofstetter, R.P. and R. B. Johnson, 1965: Study of the southern quahog (*Mercenaria campechiensis* Gmelin) in Texas waters. Project MO-R-7, Coastal Fisheries Project Reports 1965, TPWD, Austin.

The raw data have apparently been lost, but there is a remote possibility the data may be stored in the TPWD warehouse at Olmeto. If so, this data will be disorganized and undocumented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-505

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0022

PROJECT NAME: Trinity Bay clam ecology
OBJECTIVE: Determine controls on distribution of Rangia
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
A7. Increased sediment/turbidity
C2. Fisheries depletion
KEYWORDS: clams, Rangia, Trinity Bay, ecology

SOURCE: Texas A&M University

CONTACT: Library

GENERAL TYPE: Ecology

GEOGRAPHICAL COVERAGE: Trinity Bay

PERIOD OF COVERAGE: ca. 1965

MEASUREMENTS: Distribution of *Rangia cuneata* & dependency upon hydrography & predation

FORMAT: textual, tabular

COMMENTS:

Published in:

O'Heeron, M. 1966: Some aspects of the ecology of *Rangia cuneata* (Gray). M.S. Thesis, TAMU.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-510

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD014

PROJECT NAME: TPWD oyster pesticides 60's
OBJECTIVE: determine pesticide concentrations in oyster tissue
DATA USE: research
PRIORITY PROBLEM:
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: oysters, ecology, contaminants, pesticides

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704
512-448-4313

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: Trinity Bay (Beasleys Reef or Frenchys Reef), East Bay (Hannas Reef, 1965 only), Galveston Bay (Todds Dump, 1966-68)

PERIOD OF COVERAGE: 1965-68

MEASUREMENTS: Oysters collected by dredge, tong or hand. Meat ground and blended (details in report), and analyzed by electron-capture gas-liquid chromatography for:

Aldrin, BHC, Dieldrin, DDD, DDE, DDT, Endrin, Heptachlor, Heptachlor epoxide, Lindane & Methoxychlor.

Detection limit stated to be 0.010 ppm, and values near this limit reported as "trace".

FORMAT: tabular, graphical

COMMENTS: Published in:

Childress, U.R., 1965: A determination of source, amount, and area of pesticide pollution in some Texas bays. Project MO-R-1, Coastal Fisheries Project Reports 1965, TPWD, Austin.

Childress, U.R., 1966: A determination of source, amount, and area of pesticide pollution in some Texas bays. Project MO-R-8, Coastal Fisheries Project Reports 1966, TPWD, Austin.

Childress, U.R., 1967: An investigation into levels of concentration of various pesticide toxicants in some species from selected bay areas. Project MP-R-3, Coastal Fisheries Project Reports 1967, TPWD, Austin.

Childress, U.R., 1968: Levels of concentration and incidence of various pesticide toxicants in some species from selected bay areas. Project MP-R-4, Coastal Fisheries Project Reports 1968, TPWD, Austin.

Tabular concentrations are given in this publication without some of the associated field data, and apparently averaged or aggregated. The raw data have apparently been lost, but there is a remote possibility the data may be stored in the TPWD warehouse at Olmeto. If so, this data will be disorganized and undocumented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-515

DATA INVENTORY INFORMATION
GBNEP Reference Number: UTHM001

PROJECT NAME: Oyster shell mining, Hill & Masch
OBJECTIVE: description of oyster shell industry in Bay
DATA USE: survey
PRIORITY PROBLEM:
A1. Loss of habitat
A4. Bathymetric/circulation changes
A7. Increased sediment/turbidity
C2. Fisheries depletion
KEYWORDS: oysters, turbidity, economics

SOURCE: University of Texas, Hill and Masch (1969)

CONTACT: Center for Research in Water Resources,
University of Texas
Balcones Research Center
Austin TX 78712
(512)-471-3131

GENERAL TYPE: Biological, economic, anecdotal

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: mid-1960s

MEASUREMENTS: Oyster reef location, shell resources, production

FORMAT: textual and graphical

COMMENTS: While this survey does not contain any primary data, it does assemble some derivative from sources that are no longer extant, and provides a useful summary of the oyster shell industry in Galveston Bay.

Published in:

Hill, Floyd, R. and F. D. Masch, 1969: General considerations prerequisite to further Galveston Bay shell removal. Tech. Rep. CRWR-48 & Ocean Engineering HYD 15-6901, University of Texas at Austin.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-520

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0023

PROJECT NAME: West Bay scaphopods
OBJECTIVE: determine occurrence of scaphopods in West Bay
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
A2. Alteration of salinity
A6. Contamination
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: West Bay, ecology, molluscs

SOURCE: Texas A&M University

CONTACT: Library

GENERAL TYPE: Biology, ecology

GEOGRAPHICAL COVERAGE: West Bay

PERIOD OF COVERAGE: 1966-67

MEASUREMENTS: Dredged sediment samples from 54 stations analyzed for occurrence of shells of scaphopod *Dentalium texasianum*.

FORMAT: Tabular, textual

COMMENTS:

Published in:

Petersen, L. R. , 1972: Studies on the anatomy and ecological distribution of Dentalium texasianum in West Bay of the Galveston Bay complex. M.S. Thesis, TAMU.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-525

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD015

PROJECT NAME: TPWD Moses Lake
OBJECTIVE: Study changes in ecology due to Flood Protection Project
DATA USE: monitoring
PRIORITY PROBLEM:
A1. Loss of habitat
A4. Bathymetric/circulation changes
A7. Increased sediment/turbidity
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: ecology, Texas City Levee, dredge and fill, wetlands

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704
512-448-4313

GENERAL TYPE: Biology, hydrography

GEOGRAPHICAL COVERAGE: Jones Bay, Moss Lake, Dollar Bay

PERIOD OF COVERAGE: April 1966 - March 1967

MEASUREMENTS:

Water:	salinity, temperature
Sediment:	Ekman dredge, hand cores
Biota:	Minnow seine, bar seine, drag seine
Vegetation:	qualitative community distributions

FORMAT: Graphical, tabular

COMMENTS: Published in:

Johnson, R. B., 1967: The effects of engineering projects on Galveston Bay estuaries. Project 2-12-R, Coastal Fisheries Project Report 1966, Texas Parks & Wildlife Dept., Austin.

Johnson, R. B., 1967: The effects of engineering projects on Galveston Bay estuaries. Project 2-12-R-1, Coastal Fisheries Project Report 1966, Texas Parks & Wildlife Dept., Austin.

This was the first year of a projected continuing monitoring study of the effects of the Texas City-LaMarque Hurricane Flood Protection Project, of the USCE, Galveston District.

The raw data have apparently been lost, but there is a remote possibility the data may be stored in the TPWD warehouse at Olmeto. If so, this data will be disorganized and undocumented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-530

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0024

PROJECT NAME: Trinity marsh menhaden 66-68
OBJECTIVE: Determine utilization of marsh by menhaden
DATA USE: research
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A1. Loss of habitat
A2. Alteration of salinity
C1. Regulatory
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: ecology, menhaden, fish, marsh, Trinity Bay

SOURCE: Texas A&M University

CONTACT: Library

GENERAL TYPE: Ecology

GEOGRAPHICAL COVERAGE: Trinity Bay, Trinity Marsh

PERIOD OF COVERAGE: May 1966 - May 1968, semimonthly

MEASUREMENTS: Collections of menhaden, hydrographic sampling

FORMAT: tabular

COMMENTS:

Published in:

Holcomb, H.W., 1970: An ecological study of the Gulf Menhaden in a low salinity estuary in Texas. M.S. Thesis, TAMU.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-535

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD011

PROJECT NAME: TPWD sand seatrout 66-68
OBJECTIVE: population dynamics & metabolism of sand seatrout
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C2. Fisheries depletion
KEYWORDS: fish, sand seatrout, ecology

SOURCE: Texas Parks & Wildlife Dept

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704

512-448-4313

GENERAL TYPE: Analyses of TPWD data on 498 sand seatrout (*Cynoscion arenarius*)

GEOGRAPHICAL COVERAGE: Trinity Bay, Galveston Bay west of HSC, East Bay, West Bay Chocolate Bay, Christmas Bay, no specific stations

PERIOD OF COVERAGE: May 1966- March 1968

MEASUREMENTS: Sexual maturity, stomach contents, length-weight regressions, standard length-total length regressions.

FORMAT: Tabular and graphic

COMMENTS: Published as:

Moffett, A., L. McEachron and J. Key (1979), Observations on the biology of sand seatrout in Galveston and Trinity Bays, Texas, *Contr. Mar. Sci. 22*, 163-172. No presentation of raw data or ancillary measurements.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-540

DATA INVENTORY INFORMATION GBNEP Reference Number: TAMU0025
PROJECT NAME: West Bay oysters
OBJECTIVE: Ecological variability of oyster population
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
C1. Regulatory
C2. Fisheries depletion
KEYWORDS: oysters, ecology, West Bay

SOURCE: Texas A&M University

CONTACT: Library

GENERAL TYPE: Ecology

GEOGRAPHICAL COVERAGE: West Bay

PERIOD OF COVERAGE: June 1967 - June 1968

MEASUREMENTS: Hydrographic observations, population of oysters and associated fauna

FORMAT: tabular, graphical

COMMENTS:

Published in:

Gillard, R., 1969: An ecological study of an oyster population, including selected associated organisms in West Bay, Galveston, Texas. M.S. Thesis, TAMU.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-545

DATA INVENTORY INFORMATION
GBNEP Reference Number: GGS0001

PROJECT NAME: Gallaway PHR 68-69
OBJECTIVE: Effect of SES thermal plume on fish and crustaceans
DATA USE: research
PRIORITY PROBLEM:
A4. Bathymetric/circulation changes
A7. Increased sediment/turbidity
B2. Contamination of water/sediment
C1. Regulatory
KEYWORDS: fish, shrimp, crab, thermal plume, power plant

SOURCE: Gallaway (1970), Gallaway and Strawn (1974, 1975)

CONTACT: Dr. Benny Gallaway, LGL, Inc., Bryan

GENERAL TYPE: Biological, water quality

GEOGRAPHICAL COVERAGE: Upper Galveston Bay, vicinity of P.H. Robinson discharge

PERIOD OF COVERAGE: 27 Jan 68 - 20 Dec 69, monthly

MEASUREMENTS:

Biological sampling:

6ft x 35 ft bag seine at beach stations, 3/16-in mesh in bag and 3/8-inch mesh in seine. Two 100 ft tows were performed at each beach station in daylight, one perpendicular to beach, the other parallel to beach. Offshore stations sampled by 20 ft Texas-balloon trawl, 1.5-in mesh in body, 1-in mesh in cod end. Trawl tows made at night, for 3-min duration.

Field collections preserved in 10% formalin, crabs and shrimp separated and speciated, counted and measured to nearest millimeter (carapace for crabs, total length for penaeid shrimp). Fish described in Gallaway and Strawn (1974).

Water quality (field measurements only):

Temperature and dissolved oxygen by YSI DO meter
Surface pH by Analytical Measurements, Inc. portable pH meter
Conductivity, using Beckman Solu Bridge RB3-3341. Salinity determined from hydrographic nomograph.

FORMAT: Tabular. Water quality data given in appendix to Gallaway (1970) except for pH, which are "...limited. Values ranged from 6.4 to 9.1 with most being around 8.0." [p. 20]

COMMENTS: Published as:

Gallaway, Benny, 1970: Seasonal abundance, distribution and growth of commercially important marine crustaceans at a hot water discharge in Galveston Bay, Texas. M.S. Thesis, Texas A&M University, College Station.

Gallaway, B.J. and K. Strawn, 1974: Seasonal abundance and distribution of marine fishes at a hot water discharge in Galveston Bay, Texas. Contr. Mar. Sci. 18, pp. 71-137.

Gallaway, B.J. and K. Strawn, 1975: Seasonal and areal comparisons of fish diversity indices at a hot-water discharge in Galveston Bay, Texas. Contr. Mar. Sci. 19, pp. 79-89.

Gallaway, B.J. and K. Strawn, 1975: Seasonal abundance and distribution of the blue crab, *Callinectes sapidus* Rathbun, in the discharge area of the P.H. Robinson Generating Station, Galveston Bay, Texas. *Tex. J. Sci., 26* (1&2), 185-201.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

STATIONS:

Station Number	*Description*	*Latitude*		*Longitude*	
		Deg	*Min*	*Deg*	*Min*
1	Offshore section, 6000 ft W of W groin, nearshore	29	30.83	94	58.67
2	Offshore section, W of discharge	29	30.95	94	58.61
3	Offshore section, W of discharge, 1800 ft offshore	29	31.02	94	58.57
4	end of W groin	29	30.57	94	57.61
5	Center of PHR discharge	29	30.45	94	57.57

Station Number	*Description*	*Latitude*		*Longitude*	
		Deg	*Min*	*Deg*	*Min*
6	end of E groin	29	30.55	94	57.45
7	offshore section, out from E groin,	29	30.64	94	57.41
8	offshore section from E groin 1800 ft. offshore	29	30.72	94	57.35
9	Offshore section, 5500 ft E of E groin, nearshore	29	30.24	94	56.41
10	Offshore section, E of discharge	29	30.34	94	56.35
11	Offshore section, E of discharge, 1800 ft offshore	29	30.48	94	56.33
S1	Shore (seine) station, West section, 6000 ft W of W groin	29	30.72	94	58.71
S2	Shore just W of W groin	29	30.45	94	57.71
S3	Shore just E of W groin	29	30.45	94	57.61
S4	Shore, just W of E groin	29	30.45	94	57.49
S5	Shore, just E of E groin	29	30.45	94	57.39
S6	Shore, East section, 5500 ft E of E groin	29	30.17	94	56.43

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-550

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0015

PROJECT NAME: Waterfowl - Trinity Marsh
OBJECTIVE: Waterfowl population and feeding
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C1. Regulatory
D3. Loss of wetlands
KEYWORDS: birds, marshes, wetlands

SOURCE: Wildlife Sciences. Texas A&M University

CONTACT:

GENERAL TYPE: Biology - waterfowl habitats

GEOGRAPHICAL COVERAGE: Trinity Marsh: Lower Trinity River and Upper Trinity Bay

PERIOD OF COVERAGE: 1968 -1971

MEASUREMENTS:

Soil salinity determined by method of Richards (1956) (full reference not available),
pH ,
numbers of waterfowl,
feeding habits of waterfowl,
vegetation sampling

FORMAT: Tabular

COMMENTS:

Published in:

Smith, Francis William, 1973: A Study of Waterfowl Habitats, Populations and Fluctuations in the Lower Trinity River and the Upper Trinity Bay, Texas, Ph.D. Dissertation, Texas A&M University

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-555

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0021

PROJECT NAME: Oyster nematodes
OBJECTIVE: determine infection among Galveston Bay oysters
DATA USE: research
PRIORITY PROBLEM:
B2. Contamination of water/sediment
C1. Regulatory
KEYWORDS: ecology, oysters

SOURCE: Texas A&M University

CONTACT: Library

GENERAL TYPE: Biology, ecology

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: n/a

MEASUREMENTS: oysters taken from 16 sampling sites and examined for *Nematopsis* infection.

FORMAT: textual, tabular

COMMENTS:

Published in:

Anderson, R.D., 1969: Distribution & relative abundance of *Nematopsis* spp., as found in *Crassostrea virginica* in the Galveston Bay area. M.S. Thesis, TAMU.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-560

DATA INVENTORY INFORMATION
GBNEP Reference Number: GBPRJ03

PROJECT NAME: Copeland-Bechtel fish 69
OBJECTIVE: Determine ecological attributes of fish communities
DATA USE: research
PRIORITY PROBLEM:
A3. Alteration of nutrients
A6. Contamination
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: fish, ecology, diversity

SOURCE: Copeland-Bechtel Galveston Bay Project

CONTACT: B.J. Copeland
N.C. Sea Grant
NCSU, 1911 Building, Room 105
Raleigh, NC 27695

919-737-2454

GENERAL TYPE: Fish

GEOGRAPHICAL COVERAGE: Galveston Bay system

PERIOD OF COVERAGE: February, April, July and October 1969

MEASUREMENTS: 10-min trawls with 0.75-in bar mesh, fishes speciated and weighted. Shannon-Weaver diversity computed. Surface & bottom water samples collected for Winkler DO, salinity by Mohr titration & induction salinometer. Data are reported on total N (from data for the 4 species) and total P, but this is data from the GBP sampling program. See Data Report 280 for station locations.

FORMAT: Tabular and graphical

COMMENTS:

Stations occupied are those of the GBP through 32, except for the additional Sta 36 on the Houston Ship Channel just upstream from Barbours Cut (29° 42, 94°59) and the additional sta 37 within Dickinson Bay (Channel, near Buoy 21).

Total of 106,188 individuals collected representing 66 species. Raw data on fish catches reported in Appendix Tables 1-4 of the Final Report to TWQB (Copeland and Fruh, 1970). Bechtel (1970) and Copeland and Fruh (1970) contain tabulations and maps of fish diversity by number and by weight, and analyses of trawl variability, as well as statistical correlations of diversity versus environmental parameters.

The raw salinity and DO data are not presented. Only contour maps are given.

Published as :

Copeland, B.J., and E.G. Fruh, 1970: *Ecological Studies of Galveston Bay, 1969.* Final Report to TWQB, Marine Science Institute, UT.

Bechtel, Timothy J., 1970: Fish species diversity indices as pollution indicators in Galveston Bay, Texas. M.A. thesis, University of Texas at Austin.

Bechtel, T.J. and B. J. Copeland, 1970: Fish species diversity indices as indicators of pollution in Galveston Bay, Texas. *Contr. Mar. Sci., 15*, 103-132.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-565

DATA INVENTORY INFORMATION
GBNEP Reference Number: GBPRJ02

PROJECT NAME: Copeland-Fruh Ecology 69
OBJECTIVE: General study of the ecosystem of Galveston Bay, part of GBP
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
A2. Alteration of salinity
A3. Alteration of nutrients
A6. Contamination
C2. Fisheries depletion
KEYWORDS: plankton, benthos, water quality, ecology, diversity

SOURCE: Copeland-Fruh Galveston Bay Project

CONTACT: B.J. Copeland
N.C. Sea Grant
NCSU, 1911 Building, Room 105
Raleigh, NC 27695

919-737-2454

GENERAL TYPE: Nekton, Phytoplankton, Zooplankton, Benthos

GEOGRAPHICAL COVERAGE: Galveston Bay system

PERIOD OF COVERAGE: Febuary, April, July and October 1969

MEASUREMENTS: Nekton: 10-min trawls with 1.5-in stretch mesh with 0.25-in dover placed over cod end for smaller organisms, catch speciated and weighted. Phytoplankton: Clarke-Bumpus plankton sampler dragged for two minutes ("enabled a straining of about two m^3 of water for each sample"). Benthos: Petersen dredge sample screened through #30, a sampled area of about 0.25 m^2. Surface & bottom water samples collected for Winkler DO, salinity by Mohr titration & induction salinometer.

FORMAT: Tabular and graphical

COMMENTS:

See also Copeland-Bechtel data set for detailed fish studies from the same program.

Stations occupied are those of the GBP through 32, except for the additional Sta 36 on the Houston Ship Channel just upstream from Barbours Cut (29° 42, 94°59) and the additional sta 37 within Dickinson Bay (Channel, near Buoy 21). See Data Report 280 for station locations.

Data by species but grouped by broad area of the Bay (e.g. West Bay, East Bay) in Appendix Tables 5 et seq of the Final Report to TWQB (Copeland and Fruh, 1970). The report contains calculations and maps of nekton, phytoplankton, zooplankton and benthos diversity indices. Tables of the 3-5 dominant species by station for samples of February, April and July are given in Copeland (1969b).

The raw salinity and DO data are not presented. Only contour maps are given.

Water samples were obtained from key areas of the bays for microcosm experiments. These samples were analyzed for nutrients (TOC, Fe, Si, N and P), and the results presented in Copeland (1969a) but the exact dates of sampling are not presented (and maybe not known). Data from 18 April, 5 June samples are given in Copeland (1969b).

Published as :

Copeland, B.J., and E.G. Fruh, 1970: *Ecological Studies of Galveston Bay, 1969.* Final Report to TWQB, Marine Science Institute, UT.

Copeland, B.J. 1969a: Second Quarterly Report to TWQB. Marine Science Institute, UT.

Copeland, B.J. 1969b: Third Quarterly Report to TWQB. Marine Science Institute, UT.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-570

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0028

PROJECT NAME: Fish DO stress in HSC
OBJECTIVE: Determine whether DO is a factor in HSC fish kills
DATA USE: research
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A6. Contamination
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: fish, crustaceans, fish kills, contamination, ship channels

SOURCE: Zoology Dept., Texas A&M University

CONTACT:

GENERAL TYPE: Biology, water quality - organism limitations, i.e. fish and crustacean kills

GEOGRAPHICAL COVERAGE: Inland Houston ship channel

PERIOD OF COVERAGE: June - July, 1969

MEASUREMENTS:

Trawls for fish & invertebrates at HSC stations

DO and salinity data from TAMU Estuarine Systems Project used in analysis of field samples.

Laboratory determination of dissolved oxygen stress land lethality using sheepshead minnow (*Cyprinodon variegatus*) as test organism.

DO measured using azide modification of the Winkler method, observation of fish kills, toxicity tests using method in:

Dondoroff et al. ,1951: Bioassay methods for the evaluation of acute toxicity of industrial wastes to fish, Sewage Ind. Wastes 23:1380.

FORMAT: Tabular, graphical

COMMENTS:

Published in:

Parmer, David Lee, 1970: Some Mechanisms of Organism Limitations in the Inland Houston Ship Channel,M.S. Thesis, Texas A&M Univ.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

SITE LOCATIONS

Station	*Description*	*Latitude*		*Longitude*	
		Deg	*Min*	*Deg*	*Min*
0	Morgans point	29	40.81	94	58.84
2	Hog Island	29	42.05	95	00.18
4	Alex. I. old spillway	29	42.97	95	01.25
6	Humble pipeline crossing	29	43.86	95	02.63
8	Tx Eastern pipeline crossing	29	45.20	95	03.92
10	Battleship Texas	29	45.55	95	05.41
12	Patrick Bayou Inlet	29	44.34	95	06.87
16	Phillips Petroleum Corp.	29	44.79	95	10.49
20	HLP Company	29	43.49	95	13.75
24	Wharf #18	29	44.48	95	16.91

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-575

DATA INVENTORY INFORMATION
GBNEP Reference Number: HLP0001
PROJECT NAME: Cedar Bayou SES, Trinity Bay
OBJECTIVE: General field studies of the effects of new power plant
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
A4. Bathymetric/circulation changes
C1. Regulatory
KEYWORDS: Power plants, nekton, benthos, plankton, water quality

SOURCE: Houston Lighting and Power, Texas A&M University, Southwest Research Insitute

CONTACT: Mr. Bill Baker
Houston Lighting and Power
P.O. Box 1700
Houston, TX 77251

(713-922-2214)

GENERAL TYPE: Biology, hydrography

GEOGRAPHICAL COVERAGE: Trinity Bay, Cedar Bayou

PERIOD OF COVERAGE: 1969-1975

MEASUREMENTS: Varies, see below.

FORMAT: Tabular, digital since 1974, see below.

COMMENTS: As a part of the permit conditions for operation of the HL&P Cedar Bayou S.E.S., an extensive field study of hydrography and ecology of Trinity Bay and environs was performed, through contracts with SWRI and TAMU. The initial studies, some pre-operation, were performed by Texas A&M University (see below) as various thesis projects. In ca. 1974, Southwest Research assumed direction of the program. This part of the program was dictated by the permit conditions for CBSES. Under centralized management, the project became more cohesive, and, due to the requirements of the permit, more intense. All data were transmitted in hard copy to EPA Region VI, due to the pending litigation. This data set was subsequently transferred to the Federal Archive at Fort Worth, where it appears to have been destroyed. HL&P was provided a set of the SWRI data on mag tape, but its computer center was unable to read the tapes due to a

combination of inadequate documentation and incompatible computer systems. These tapes were loaned to this project, but as of this writing, UT has been unable to crack the code. Thus, it would appear that most of the raw data, at least since 1974, has been lost.

PUBLICATIONS:

Texas A&M Publications deriving from this work include:

Anonymous, 1969: Number of individuals and survival rate of economically important organisms, etc. Interim report for October 1968 - March 1969.

Dixon, Claude, A., 1974: A study of food habits of two species of silverside, *Menidia beryllina* and *Membras martinica* in upper Galveston Bay, Texas. M.S. Thesis, Texas A&M University.

Gallaway, Benny, and Kirk Strawn, 1973: Species diversity, seasonal abundance, and distribution of marine fishes etc. TAES, TAMU.

Holt, Gloria J., 1976: Community structure of macrozooplankton in Trinity and upper Galveston Bays, with special reference to the cooling water system of Cedar Bayou Electric Generating Station. Ph.D. Dissertation, Wildlife and Fisheries Sciences, Texas A&M University, College Station.

Johnson, Kenneth, W., 1973: Occurrence and abundance of fishes in intake and discharge areas of Cedar Bayou. Ph.D. Dissertation, Texas A&M University.

Matlock, G. C., 1972: Fish condition as an indicator of water quality in upper Galveston Bay system, Texas. M.S. Thesis, Texas A&M University.

McWilliam, E., F. Waller, J. Bauml, W. Fonteno, R. Wiedenfeld, R. Sanderson et al., 1974: Effects of adding Unit 4 and cooling towers at the P.H. Robinson Generation Station etc. Annual Report, 1974, TAES 1869, TAMU.

McWilliam, E., F. Waller, R. Wiedenfeld, G. Apps, et al., 1980: The effects of saltwater cooling towers at the P.H. Robinson S.E.S. etc. TAES Project 1869-6308, TAMU.

Strawn K. and Rollin Reimer, 1973: Final report on the river shrimp in the Galveston Bay system of Texas.

Strawn K. and Rollin Reimer, 1973: Abundance, distribution and injury of four decapod crustaceans collected from Dickinson Bayou and Bay etc.

Waas, B.P. and K. Strawn, 1983: Seasonal and lunar cycles in gonadosomatic indices and spawning readiness of Fundulus grandis. *Contr. Mar. Sci., 26,* 127-141.

Williams, G.E., 1972: Species composition, distribution, and abundance of macrobenthic organisms in the intake and discharge areas of a steam-electric generating stations before and during initial start-up. M.S.Thesis, Wildlife and Fisheries Science, Texas A&M University, College Station.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices. However, the SWRI part of the program was specified in conjunction with EPA negotiations, and presumably the water-quality analyses were carried out in conformity to EPA manuals and guidance.

ADDENDUM [November 1991]: We are now able to read the tapes. As most of the information is alphanumeric, nearly each tape is full to the hub, and special processing codes will be necessary to pull the data off.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-580

DATA INVENTORY INFORMATION
GBNEP Reference Number: DIX0001

PROJECT NAME: CBSES fish Dixon 74
OBJECTIVE: determine stomach contents of silversides
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: power plants, fish, ecology

SOURCE: Dixon (1974)

CONTACT: Mr. Bill Baker
Houston Lighting and Power
P.O. Box 1700
Houston, TX 77251
(713-922-2214)

GENERAL TYPE: Biological

GEOGRAPHICAL COVERAGE: Trinity Bay, Tabbs Bay

PERIOD OF COVERAGE: 1 August 1969 to 23 August 1971, bi-weekly

MEASUREMENTS: Stomach contents of silversides (*Menidia beryllina* and *Membras martinica*), from shoreline seines

FORMAT: tabular and graphical

COMMENTS: Part of the Cedar Bayou studies sponsored by Houston Lighting and Power. Focussed on biweekly bag seine collections at five stations near discharge of Cedar Bayou in Trinity Bay, and one station in Tabbs Bay near intake canal. Two 20-m bag seine hauls per collection, one toward shore the other parallel to shore. Fish measured and five of each size class subjected to stomach content inventory. Published in:

Dixon, Claude, A., 1974: A study of food habits of two species of silverside, *Menidia beryllina* and *Membras martinica* in upper Galveston Bay, Texas. M.S. Thesis, Texas A&M University.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-585

DATA INVENTORY INFORMATION
GBNEP Reference Number: WLL0001

PROJECT NAME: CBSES macrobenthos
OBJECTIVE: Determine effect of Cedar Bayou SES on macrobenthos
DATA USE: research
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A4. Bathymetric/circulation changes
B2. Contamination of water/sediment
C1. Regulatory
KEYWORDS: Power plants, benthos

SOURCE: Williams (1972)

GENERAL TYPE: biology, water quality

GEOGRAPHICAL COVERAGE: Trinity Bay, Cedar Bayou

PERIOD OF COVERAGE: 16 October 1969 - 17 December 1970, biweekly

MEASUREMENTS:

Bottom sampling by (1) Birge-Ekman dredge (soft substrates) (2) frame sampler (hard substrates).

Hydrological measurements: water temperature, dissolved oxygen, conductivity, pH, turbidity, and tidal direction.

FORMAT: Tabular

COMMENTS: Sampling stations in Tabbs Bay, CBSES intake, discharge, and "Mid-Bay".

Published in:

Williams, G.E., 1972: Species composition, distribution, and abundance of macrobenthic organisms in the intake and discharge areas of a steam-electric generating stations before and during initial start-up. M.S.Thesis, Wildlife and Fisheries Science, Texas A&M University, College Station.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-590

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0026

PROJECT NAME: Galveston Bay hydroids
OBJECTIVE: survey distribution and species of hydroids
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
A6. Contamination
C1. Regulatory
C2. Fisheries depletion
KEYWORDS: hydroids, ecology

SOURCE: Texas A&M University

CONTACT: Library

GENERAL TYPE: biology, ecology

GEOGRAPHICAL COVERAGE: Galveston Bay

PERIOD OF COVERAGE: ca. 1970

MEASUREMENTS: Collection and speciation of hydroids

FORMAT: tabular, textual

COMMENTS:

Published in:

Defenbaugh, R. 1970: Occurrence and distribution of the hydroida of the Galveston Bay area. M.S. Thesis, TAMU.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-595

DATA INVENTORY INFORMATION
GBNEP Reference Number: MAT001

PROJECT NAME: Matlock Trinity Bay 70-71
OBJECTIVE: Year-long survey of biota in upper bay
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
A3. Alteration of nutrients
C2. Fisheries depletion
KEYWORDS: fish, shrimp, shellfish, ecology

SOURCE: Matlock (1972)

CONTACT: Mr. Bill Baker
Houston Lighting and Power
P.O. Box 1700
Houston, TX 77251

(713-922-2214)

GENERAL TYPE: Biological, Water quality

GEOGRAPHICAL COVERAGE: Trinity Bay, Cedar Bayou, Tabbs Bay

PERIOD OF COVERAGE: January 1970 - December 1971

MEASUREMENTS: Seine and trawl collections, quarterly
water quality, biweekly

FORMAT: tabular, see HL&P Trinity Bay/ Cedar Bayou

COMMENTS: This was a part of the larger-scale Cedar Bayou studies sponsored by HL&P. This presents some of the hydrological data collected, principally from those stations in Cedar Bayou and in the grid around the SES outfall.

Published in:

Matlock, G. C., 1972: Fish condition as an indicator of water quality in upper Galveston Bay system, Texas. M.S. Thesis, Texas A&M University.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-600

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0027

PROJECT NAME: Trinity Bay clams 70
OBJECTIVE: determine seasonal variation in clam condition
DATA USE: research
PRIORITY PROBLEM:
A6. Contamination
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: Rangia, clams, ecology, Trinity Bay

SOURCE: Texas A&M University

CONTACT: Library

GENERAL TYPE: Biology, ecology

GEOGRAPHICAL COVERAGE: Trinity Bay

PERIOD OF COVERAGE: April, 1970 - March 1971, biweekly

MEASUREMENTS: Clam (*Rangia cuneata*) collections in Trinity Bay. Total meat analyzed for: ash free dry weight, glycogen, protein and lipid.

FORMAT: Tabular, graphical

COMMENTS:

Published in:

Bedinger, C., 1974: Seasonal changes in condition and biochemical constituents of the brackish water clam. Ph.D. Dissertation, TAMU.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-605

DATA INVENTORY INFORMATION
GBNEP Reference Number: DBTU001

PROJECT NAME: Clam tissue Trinity Bay 70-71
OBJECTIVE: Determine dieldrin residues in clams
DATA USE: research
PRIORITY PROBLEM:
A6. Contamination
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: clams, Rangia, pesticides, chlorinated hydrocarbons

SOURCE: Department of Biology, Texas A&M University

CONTACT: Jack Anderson

GENERAL TYPE: Biology, water quality

GEOGRAPHICAL COVERAGE: McCollum Park, Trinity Bay

PERIOD OF COVERAGE: October 1970 - September 1971

MEASUREMENTS: Dieldrin residue in clam tissue. Clams taken from nearshore in 1-3 ft of water, 10 randomly selected individuals shucked and frozen. Field measurements of temperature (thermometer) and salinity (refractometer), no presented. Tissue prepared according to FDA procedure, following:

Food & Drug Administration, 1969: Methods which detect multiple residues. In: *Pesticide analytical manual, 1.* U.S. Dept. HEW.

Mills, P., 1959: Detection & semiquantitative estimation of chlorinated organic pesticide residues in foods by paper chromatography. *J. Assoc. Off. Anal. Chem. 42*(4), p 734.

i.e. extraction of residues with acetonitrile, partitioning in petroleum ether & clean-up on Florisil column. Cleaned samples analyzed in gas-liquid chromatograph, with 2 x 4 mm glass coil column packed with 80/100 mesh Gas Chrom Q Support. Carrier gas was pre-purified nitrogen and operating temperatures: injector, 260°C, column, 200°C, detector 215°C. Dieldrin recoveries were above 85%.

Clam tissue Trinity Bay 70-71

FORMAT: Graphical

COMMENTS: Published in :

Petrocelli, S., J. Anderson, and A. Hanks, 1975: Seasonal fluctuations of dieldrin residues in the tissues of the marsh clam *Rangia cuneta* from a Texas estuary. *Tex. J. Sci., 25*(3&4), pp 443-448.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-610

DATA INVENTORY INFORMATION
GBNEP Reference Number: UMSI001

PROJECT NAME: Holland et al benthic 71-72
OBJECTIVE: Characterize benthic community structure
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
A6. Contamination
B2. Contamination of water/sediment
D3. Loss of wetlands
KEYWORDS: benthos, ecology

SOURCE: UT Marine Science Institute

CONTACT: C.H. Oppenheimer
University of Texas
Austin, TX 78712

512-471-3434

GENERAL TYPE: benthos

GEOGRAPHICAL COVERAGE: Galveston Bay, Trinity Bay, West Bay, East Bay

PERIOD OF COVERAGE: October 1971, January, April, July 1972

MEASUREMENTS: Four grabs per station with Jackson volumetric bottom sampler, 25x18 cm area to 7 cm depth. Samples sieved through 1.5 mm mesh and organisms preserved for later speciation and counting.

FORMAT: Tabular

COMMENTS: Published in:

Holland, J.S., N.J. Maciolek and C.H. Oppenheimer, 1973: Galveston Bay benthic community structure as an indicator of water quality. *Contr. Mar. Sci. 17*, 169-188.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

SAMPLING STATIONS:

Five stations occupied, viz.

22	Upper Galveston Bay
26	Trinity Bay
29	East Bay
17	Out from Texas City S of Dike
14	West Bay near Karankaway Reef

These are standard (routine) Galveston Bay Project stations (see Data Report 280 for exact locations). Salinity, water temperature and dissolved oxygen were measured at each station but are not reported.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-615

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAM0002

PROJECT NAME: Lowe benthic algae 72-73
OBJECTIVE: community ecology of marine benthic algae of Galveston Island
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
B2. Contamination of water/sediment
D3. Loss of wetlands
KEYWORDS: benthos, algae, plankton

SOURCE: Texas A&M, Dept of Biology

CONTACT:

GENERAL TYPE: Benthic algae

GEOGRAPHICAL COVERAGE: Galveston Island, Back bay, inlets and shorefront

PERIOD OF COVERAGE: June 1972 - June 1973, monthly to bi-monthly

MEASUREMENTS: Presence/absence of species

FORMAT: tabulations by species

COMMENTS: Results published as G. Lowe and E. Cox (1978),Species composition and seasonal periodicity of the marine benthic algae of Galveston Island, *Texas, Contr. Mar. Sci. 21*, 9-24. No indication of other variables or measurements, or whether quantitative algae counts were made.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

SAMPLING STATIONS

Station	*Description*	*Latitude*	*Longitude*
I	South Jetty, N side near Big Reef	29° 20.0	94° 43.3
II	End of Groin, 17th St.	29° 17.7	94° 46.8
III	End of groin, 50th St.	29° 16.2	94° 49.9
IV	N side Pelican Island, County Park	29° 20.8	94° 47.9
V	Back Bay near mouth of Oxen Bayou, Spartina marsh	29° 15.0	94° 55.7
VI	West end Galv Is, inside San Luis Pass	29° 05.6	95° 07.5

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-620

DATA INVENTORY INFORMATION
GBNEP Reference Number: CEMI001

PROJECT NAME: CEMI Trinity Bay
OBJECTIVE: Determine dependence of ecology on freshwater inflow
DATA USE: research
PRIORITY PROBLEM:
- A1. Loss of habitat
- A2. Alteration of salinity
- A3. Alteration of nutrients
- C2. Fisheries depletion
- D3. Loss of wetlands

KEYWORDS: biology, ecology, marsh, sediments, plankton, fish

SOURCE: Coastal Ecosystems Management, Inc.

CONTACT: see below

GENERAL TYPE: biology, water quality

GEOGRAPHICAL COVERAGE: Trinity Bay

PERIOD OF COVERAGE: August 1972 - June 1973, roughly bimonthly (see below)

MEASUREMENTS:

Sampling: 52 stations occupied, distributed through the bay and marsh areas.
surface and bottom measurements in situ
surface and bottom water sampling carried out by on-board pump
sediment sampling (for texture and bacteria) by hand coring
plankton sampling with 12-in dia., #25 mesh plankton net, towed at one knot for 5 mins.
Marsh vegetation randomly sampled by throwing 0.5 m^2 frame into area, & clipping enclosed vegetation down to ground.
Benthic sampling by 1/25 m^2 Van Veen grab sampler, filtered by 250 mm mesh in field, and 4.0, 2.0, 1.0, 0.5,0.25 mm mesh screens in lab.
Nekton & epibenthos in bay sampled by 3.5-m otter trawl with 356 mm mesh opening & cod end of 160 mm, towed at two knots for 10 minutes.
Nekton & epibenthos in marsh sampled by 9.15-m seine with 160mm mesh, dragged over 4x10-m area.

Water quality:

field:	temperature	Hydrolab Model 6D Surveyor
	dissolved oxygen	Hydrolab Model 6D Surveyor
	conductivity	Hydrolab Model 6D Surveyor
	pH	Hydrolab Model 6D Surveyor
	Eh	Hydrolab Model 6D Surveyor
	H2S (bottom only)	Hach Kit (Model DR-EL)
	turbidity (surface)	Hach Kit (Model DR-EL)
	NO2+NO3	Hach Kit (Model DR-EL) modified diazotization method
	orthophosphate	Hach Kit (Model DR-EL) stannous reduction method
	sulphate	Hach Kit (Model DR-EL), turbidimetry
lab:	TOC	Beckman 44 TOC analyzer
	metal ions (except mercury)	Perkin-Elmer Model 303
	mercury	Jarrel-Ash AA spectrophotometer
	Chlorophyll-a	(see below)

Sediment:

texture by sieving (> 62 mm) and hydrometer analysis of settling tube (< 62mm)

Biological:

coliforms (bottom only)	millipore filter (MPN)
Total bacteria (bottom only & sediment)	phase microscopy
Plankton	Whipple cell, drop sedimentation method (Standard Methods)
Chlorophyll-a productivity:	2 1-litre samples taken, one fixed immediately (with Formalin), the second incubated in a water bath at ambient (field) temperature, then fixed. Chl-a in the two differenced.
Vegetation	speciated and dry weight measured (Brown, 1954)
Benthos	organisms separated by size groups according to sieving (see above), speciated and counted
Nekton	speciated, counted & measured

Sampling schedule:

August 1972	18-23 December 1972
5-10 February 1973	19-24 March 1973
6-11 May 1973	11-15 June 1973

Brown, Dorothy, 1954: *Methods of surveying & measuring vegetation*. Bull. 42, Commonwealth Agriculture Bureau, Farnham Royal, Bucks, England.

FORMAT: Tabular, graphical

COMMENTS:

CEMI was a Fort Worth based corporation specializing in environmental projects. No trace of the company could be found in this study, and the Corps of Engineers, Fort Worth District, which sponsored the research given above, has no records from the project other than the published reports. The project is described in:

Solomon, D. E. and G. D. Smith, 1973: Seasonal assessment of the relationship between the discharge of the Trinity River and the Trinity Bay ecosystem. Final Report for Contract DACW-63-73-C-0059, Coastal Ecosystems Management, Inc. Fort Worth.

This contains an analysis of the data with averaged and processed results.

STATION LOCATIONS:

Station	*Latitude*			*Longitude*		
	Deg	*Min*	*Sec*	*Deg*	*Min*	*Sec*
TB-1	29	33	40	94	47	10
TB-2	29	35	50	94	49	35
TB-3	29	35	35	94	46	45
TB-4	29	35	25	94	44	15
TB-5	29	37	35	94	45	35
TB-6	29	38	20	94	43	00
TB-7	29	39	25	94	44	25
TB-8	29	39	50	94	47	10
TB-9	29	41	30	94	45	35
TB-10	29	41	00	94	43	45
TB-11	29	42	40	94	43	25
TB-12	29	43	05	94	45	05
TB-13	29	44	45	94	46	30
TB-14	29	44	55	94	48	35
TB-15	29	43	20	94	47	05
TB-16	29	42	45	94	50	20
TB-17	29	40	55	94	51	10
TB-18	29	39	30	94	52	50
TB-19	29	37	05	94	51	50
TB-20	29	38	40	94	50	20
TB-21	29	38	00	94	48	20
TB-22	29	40	40	94	48	50
TB-23	29	42	00	94	48	00
TB-24	29	45	25	94	41	40
TB-25	29	46	05	94	41	50
TB-26	29	46	50	94	43	30
TB-27	29	53	15	94	43	00
TB-28	29	51	25	94	43	00

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-625

DATA INVENTORY INFORMATION
GBNEP Reference Number: DUT0001

PROJECT NAME: Beachfront algae 72
OBJECTIVE: identify algae of beach at Galveston
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
D4. Use of littoral property
KEYWORDS: algae, beach, ecology

SOURCE: Dykstra et al. (1975), University of Texas

CONTACT:

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: Galveston shorefront

PERIOD OF COVERAGE: summer, 1972

MEASUREMENTS: Algae population in "transect" about center of Galveston Island: speciation only.

FORMAT: Tabular

COMMENTS: Published in:

Dykstra, R., F. MacEntee, and H. Bold, 1975: Some edaphic algae of the Texas coast. *Tex. J. Sci., 26* (1&2), 171-177.

Sand probably taken predominantly from dunes below end of seawall, though paper has little specificity as to location. 64 genera identified.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-630

DATA INVENTORY INFORMATION GBNEP Reference Number: RICEU02
PROJECT NAME: Leadshot in marshes
OBJECTIVE: Determine extent of lead pollution in wetlands due to hunting
DATA USE: research
PRIORITY PROBLEM: A1. Loss of habitat A6. Contamination B2. Contamination of water/sediment
KEYWORDS: birds, waterfowl, lead, contamination, wetlands

SOURCE: Rice University

CONTACT: Library

GENERAL TYPE: Biology, chemistry

GEOGRAPHICAL COVERAGE: Trinity Marsh

PERIOD OF COVERAGE: ca. 1973

MEASUREMENTS: Soil analysis for lead, to determine extent of lead shot pollution

FORMAT: Textual, tabular

COMMENTS:

Published in:

Price, L.H. , 1974: Lead in Texas wetlands and its relationship to waterfowl hunting. M.A. Thesis, Rice Univ., Houston.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-640

DATA INVENTORY INFORMATION
GBNEP Reference Number: NMF0001

PROJECT NAME: Dollar Bay shrimp 73
OBJECTIVE: shrimp population dynamics in dead-end canal
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C1. Regulatory
C2. Fisheries depletion
D3. Loss of wetlands
D4. Use of littoral property
KEYWORDS: canals, shrimp, ecology

SOURCE: National Marine Fisheries, Galveston Laboratory

CONTACT: Dr. Charles Caillouet
National Marine Fisheries Service
4700 Ave. U
Galveston, TX 77551
(409)-766-3500

GENERAL TYPE: biological, water quality

GEOGRAPHICAL COVERAGE: Dollar Bay

PERIOD OF COVERAGE: 6-8 July 1973

MEASUREMENTS: salinity, temperature, 5-min tows every 0.5 hrs, shrimp speciated, counted and length measured.

COMMENTS: Sampling location in dead-end canal opening into Dollar Bay. Location: 29° 25.5, 94° 54.1.

Temperature measured every 0.5 hrs, plotted as Fig. 2 in Clark and Caillouet (1975). Salinity measured every 8 hours, but did not vary significantly from 9 ppt. Reduced statistics given in publication, raw data available from above source.

Publication:

Clark, S. and C. Caillouet, 1975: Diel fluctuations in catches of juvenile brown and white shrimp in a Texas estuarine canal. *Contr. Mar. Sci., 19*, pp 119-124.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-645

DATA INVENTORY INFORMATION
GBNEP Reference Number: UH002

PROJECT NAME: Christmas Bay zooplankton
OBJECTIVE: Determine community dynamics of zooplankton assemblage
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
A2. Alteration of salinity
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: Christmas Bay, ecology, zooplankton

SOURCE: University of Houston

CONTACT: Library

GENERAL TYPE: Biology, ecology, hydrography

GEOGRAPHICAL COVERAGE: Christmas Bay

PERIOD OF COVERAGE: September 1973 - December 1974, monthly

MEASUREMENTS:
zooplankton sampling with 239 um mesh nets
salinity
temperature

at 5 stations, 4 in Christmas Bay, 1 in Cold Pass

FORMAT:

COMMENTS:

Published in:

Bagnall, R.A., 1976: Definition and persistence of an estuarine zooplankton assemblage. Ph.D. dissertation, University of Houston.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-650

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0008

PROJECT NAME: PHR intake sampling
OBJECTIVE: Effects of entrainment on various organisms
DATA USE: research
PRIORITY PROBLEM:
A4. Bathymetric/circulation changes
C1. Regulatory
C2. Fisheries depletion
KEYWORDS: power plants, entrainment, plankton, zooplankton, crustaceans

SOURCE: Texas A&M University

CONTACT: Kirk Strawn
Department of Wildlife and Fisheries

GENERAL TYPE: biology

GEOGRAPHICAL COVERAGE: Upper Galveston Bay, Dickinson Bayou

PERIOD OF COVERAGE: June-November 1974, May-September 1975, twice daily

MEASUREMENTS: Organisms collected from intake screens and from intake canal of P.H. Robinson SES.

FORMAT: Tabular

COMMENTS: Published in:

Chase, Cathleen L., 1977: Survival of zooplankton entrained into the cooling water system and supplemental cooling towers of a steam-electric generating station located on Galveston Bay, Texas. M.S. Thesis, Wildlife and Fisheries, Texas A&M University, College Station.

Chase, David Mayo, 1978: Survival rates of fishes and macroinvertebrates impinged on the vertically revolving intake screens of a power plant on Galveston Bay, Texas. M.S. Thesis, Wildlife and Fisheries Sciences, Texas A&M University, College Station.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-655

DATA INVENTORY INFORMATION
GBNEP Reference Number: MCA0001

PROJECT NAME: McAden zooplankton PHR 74-75
OBJECTIVE: Effect of power plant entrainment on zooplankton/itchythoplankton
DATA USE: research
PRIORITY PROBLEM:
A4. Bathymetric/circulation changes
C1. Regulatory
C2. Fisheries depletion
D2. Bathymetric/circulation changes
KEYWORDS: Power plants, ctenophores, plankton

SOURCE: McAden (1977)

CONTACT: Texas A&M University library

GENERAL TYPE: biological, water quality

GEOGRAPHICAL COVERAGE: Upper Galveston Bay, Dickinson Bay, intake and discharge canals, P.H. Robinson S.E.S.

PERIOD OF COVERAGE: 26 Jun 74 - 25 Sep 75, semi-monthly, except monthly for 23 Oct 74 - 16 May 75.

MEASUREMENTS:

Biological:

12.5 cm Clarke-Bumpus Plankton Sampler with 153um (#10) mesh net, for both surface and near-bottom samples. 2-3 min tows, taken during daylight except during semi-monthly sampling, when the second tow per month was taken at night.

If sample contained ctenophores, it was filtered through 7mm screen, the ctenophores were rinsed, examined fro entrapped organisms, counted and discarded. Sample was then preserved in 10% formalin.

In lab, sample was stained with Rose Bengal, organisms separated and counted. All fish, penaeid shrimp, grass shrimp and crabs were measured. Four 5-ml subsamples were then subjected to microscopic counting.

Water quality:
Temperature and DO from surface and near-bottom measured with Hydrolab Model IIA Surveyor. DO was calibrated for freshwater, and is not conductivity compensated.
Salinity from surface, using American Optical refractometer.
Turbidity from surface with Hach Model 2100A turbidimeter.

FORMAT: Tabular

COMMENTS: Published in:

McAden, D.C. 1977: Species composition, distribution and abundance of zooplankton (including ichthyoplankton) in the intake and discharge canals of a steam-electric generating station located on Galveston Bay, Texas. M.S. Thesis, Texas A&M University.

Three stations occupied:

Station Number	*Description*	*Latitude*		*Longitude*	
		Deg	*Min*	*Deg*	*Min*
1	P.H. Robinson intake canal, 700 m upstream from intakes	29	29.14	94	58.35
2	P.H. Robinson discharge, 130 m downstream from plant discharge	29	29.36	94	58.78
3	Discharge canal below towers, 2 km downstream from Sta 2	29	30.16	94	58.02

Intake data should be typical of Dickinson Bay.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-660

DATA INVENTORY INFORMATION
GBNEP Reference Number: RUFW001

PROJECT NAME: Vegetation Chambers County
OBJECTIVE: survey vegetation communities
DATA USE: research
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A1. Loss of habitat
A7. Increased sediment/turbidity
D3. Loss of wetlands
KEYWORDS: vegetation, cordgrass, Spartina, ecology

SOURCE: Rice University and U.S. Fish & Wildlife Service

CONTACT:

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: Chambers County

PERIOD OF COVERAGE: ca. 1975

MEASUREMENTS: Survey and categorization of vegetational communities, with dominant species

FORMAT: Map and tabular data

COMMENTS: Original field records cannot be located. Only publication in:

Harcombe, P. & J. Neaville, 1977: Vegetation types of Chambers County, Texas. *Tex. J. Sci. 29* (3-4), 209-234.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-665

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD010

PROJECT NAME: TPWD red drum tagging
OBJECTIVE: Tag & recapture experiments on red drum
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C2. Fisheries depletion
KEYWORDS: fish, red drum, ecology

SOURCE: Texas Parks & Wildlife Dept.

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704

512-448-4313

GENERAL TYPE: Fish, tag and return

GEOGRAPHICAL COVERAGE: Texas coast, release from Galveston Bay; no further specificity

PERIOD OF COVERAGE: Nov 75 - Sep 78

MEASUREMENTS: Return of tags from coastal fishermen

FORMAT: Tabular

COMMENTS: Limited to red drum (*Sciaenops ocellatus*). Tables of percent return from different sections of the coast, and statistics on distances involved. Published in:

Osburn, H.A., G.C. Matlock, and A.W. Green, 1982: Red drum movement in Texas bays. *Contr. Mar. Sci., 25*, 85-97.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-670

DATA INVENTORY INFORMATION
GBNEP Reference Number: TWDB004

PROJECT NAME: Trinity Bay - EHA
OBJECTIVE: Monitor microecology and chemistry
DATA USE: research
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A2. Alteration of salinity
A3. Alteration of nutrients
C2. Fisheries depletion
KEYWORDS: ecology, water quality, algae, plankton, benthos

SOURCE: Texas Water Development Board

CONTACT: Dr. David Brock
Texas Water Development Board
P.O. Box 13231
Austin TX 78711-3231

512-463-7984

GENERAL TYPE: Biology, water quality

GEOGRAPHICAL COVERAGE: Trinity Bay, six stations

PERIOD OF COVERAGE: September 1975 - August 1976, monthly

MEASUREMENTS:
In situ:
conductivity
temperature
dissolved oxygen
pH
Water samples at surface and bottom:
Phytoplankton - Speciation and counts in Sedgwick-Rafter counting chamber
Zooplankton - Speciation and counts
Chemistry:
Nitrogen species: organic, ammonia, nitrite, nitrate
Phosphorus: orthophosphate & total phosphate
Carbon: Total organic carbon
Benthal, Ponar dredge:
Benthos: speciation and counts

FORMAT: digital

COMMENTS:

This work was performed by the consulting firm of Espey Huston & Associates under contract to the TWDB. Apparently, the terms of the contract required data *collection* only, as there was no report, nor is there any technical file on hand at Espey, Huston. The data was transmitted to TWDB on magnetic tape, and the digital information is part of the Coastal Data System of TWDB. Unfortunately, the codes for interpretting the data have been lost, so the information is indecipherable.

The original lab counting sheets have been located in a warehouse at Espey Huston, and are now in Ward's possession at CRWR/UT. While these notes are rough and disorganized, by correlating these with the numeric information on the tape it may be possible to decipher the digital files.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

STATION LOCATIONS:

Station	*Latitude*		*Longitude*	
	Deg	*Min*	*Deg*	*Min*
1	29	38	94	55
2	29	42	94	49
3	29	44	94	45
4	29	42	94	43
5	29	38	94	46
6	29	32	94	50

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-675

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD002

PROJECT NAME: TPWD Coastal Fish
OBJECTIVE: General biological monitoring of fish & shellfish
DATA USE: monitoring
PRIORITY PROBLEM:
- A2. Alteration of salinity
- A3. Alteration of nutrients
- A6. Contamination
- C2. Fisheries depletion

KEYWORDS: fish, shrimp, shellfish, hydrography

SOURCE: Texas Parks & Wildlife Department

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704

512-448-4313

GENERAL TYPE: Biology, water quality

GEOGRAPHICAL COVERAGE: Galveston Bay including Houston Ship Channel above Morgans Point to the San Jacinto River

PERIOD OF COVERAGE: 4 Nov 1975 - present

MEASUREMENTS:

Biological Sampling:
- Gill Net, 90 per year
- Bag Seine, 192 per year
- Beach Seine & Bag Seine, 42 per year
- Trawl
  - Gulf beach shore, 192 per year
  - Upper portion of bay nearest river mouths, 120 per year
  - Lower portion of bay nearest inlets, 120 per year
- Oyster dredge (reef vicinity), 672 per year

Water quality:
- Water sample taken at beginning and end of sample duration

Field measurements of:
- Temperature - YSI DO meter (glass thermometer backup)
- Dissolved Oxygen - YSI DO meter (Hach Winkler backup)
- Salinity - refractometer
- Turbidity - Hach turbidimeter

Sample depth:
- Surface, for seines and gill nets
- 1 ft above bottom for trawl and oyster dredge

FORMAT: Digital data base

COMMENTS: The TPWD has instituted a comprehensive, well-organized program of coastal sampling, which includes digitized data entry and centralized data management as a key component. The general field procedures are specified in the Marine Resource Monitoring Operations Manual, which is revised annually and assures a uniform methodology in the field samples. The data base entry, error checking, and file maintenance are detailed in Coastal Fisheries Data Processing Manual, which is revised frequently.

Unlike most agency sampling programs, the TWPD does not return to a fixed network of sampling stations but rather determines sample location by a method of random selection, with the objective of eliminating long-term bias in the data that might result from continued sampling of the same stations. The entire coastal zone is divided into a grid of 1-minute cells, each of which is designated as to whether it is sampleable by the various gear types. The grid cells to be sampled are determined in Austin by a randomized procedure. In the field, the designated grid is further subdivided into a 12x12 network of "gridlets", each of which is 5 seconds on a side. Gridlets appropriate to the intended gear are selected at random for actual sampling. The water quality information are taken at the beginning of the sample run and at the end (if the total duration exceeds 4 hours).

All specimens greater than 5mm in length are speciated and counted. Subsets of some fish species are further quantified by length and weight. Specific procedures for each sample type are delineated in the Operations Manual.

In addition, special data procedures are specified for tag and recapture experiments and for fish-kill surveys.

Through June 1990, there are about 12,000 records (i.e. station-date entries) of information within the Galveston Bay area. The distribution of these data by location in the system is indicated by the attached table of total number of station-dates within 1-min x 1-min (lat,long) grids on the system.

QUALITY ASSURANCE/QUALITY CONTROL: QA/QC procedures are carefully delineated in the Operations Manuals, with respect to field operations. There is no QA/QC plan extant for the data entry/data manipulation process.

Total number of sample events within 1-min x 1-min cells in Galveton Bay:

lat	long				
2900	9513	1	2907	9510	22
2900	9514	2	2907	9511	3
2901	9449	1	2908	9502	3
2901	9510	1	2908	9503	4
2901	9511	12	2908	9504	13
2901	9512	5	2908	9505	8
2901	9513	1	2908	9506	9
2901	9514	1	2908	9507	14
2902	9501	1	2908	9508	13
2902	9509	5	2908	9509	16
2902	9510	23	2908	9510	1
2902	9511	33	2909	9501	15
2902	9512	3	2909	9502	8
2902	9513	13	2909	9503	9
2903	9505	1	2909	9504	6
2903	9509	18	2909	9505	6
2903	9510	7	2909	9506	5
2903	9511	5	2909	9507	23
2903	9512	16	2909	9508	11
2903	9513	1	2909	9509	14
2903	9514	1	2910	9500	2
2904	9458	1	2910	9501	21
2904	9507	2	2910	9502	10
2904	9508	5	2910	9503	7
2904	9509	5	2910	9504	2
2904	9510	20	2910	9505	13
2904	9511	37	2910	9506	20
2904	9512	10	2910	9507	15
2904	9513	?	2910	9508	18
2904	9514	4	2910	9509	22
2905	9500	1	2911	9458	1
2905	9506	6	2911	9459	14
2905	9507	1	2911	9500	37
2905	9509	5	2911	9501	14
2905	9510	19	2911	9502	6
2905	9511	55	2911	9503	17
2905	9512	7	2911	9504	5
2905	9513	10	2911	9505	13
2905	9514	3	2911	9506	18
2906	9505	1	2911	9507	30
2906	9506	24	2911	9508	21
2906	9507	2	2911	9509	22
2906	9508	2	2911	9510	11
2906	9509	17	2911	9511	8
2906	9510	27	2912	9455	1
2906	9511	62	2912	9457	27
2906	9512	2	2912	9458	23
2907	9504	2	2912	9459	36
2907	9505	9	2912	9500	46
2907	9506	8	2912	9501	22
2907	9507	8	2912	9502	1
2907	9508	6	2912	9503	1
2907	9509	7	2912	9504	1

Samples in 1-min grids, 2/7

lat	long				
2912	9509	4	2917	9458	
2912	9510	20	2918	9449	15
2912	9511	5	2918	9450	2
2912	9512	5	2918	9451	13
2912	9513	1	2918	9452	2
2912	9514	1	2918	9453	9
2913	9449	1	2918	9454	19
2913	9456	15	2918	9455	34
2913	9457	21	2918	9456	11
2913	9458	3	2919	9445	2
2913	9459	10	2919	9446	3
2913	9500	48	2919	9449	29
2913	9501	13	2919	9450	5
2913	9505	1	2919	9451	7
2913	9513	2	2919	9452	14
2913	9514	1	2919	9453	14
2914	9452	1	2919	9456	1
2914	9455	20	2920	9444	43
2914	9456	20	2920	9445	72
2914	9457	15	2920	9446	9
2914	9458	4	2920	9447	4
2914	9459	3	2920	9449	20
2914	9500	18	2920	9450	8
2914	9501	11	2920	9451	18
2915	9453	3	2920	9452	7
2915	9454	11	2920	9453	35
2915	9455	21	2920	9454	4
2915	9456	36	2921	9444	87
2915	9457	13	2921	9445	90
2915	9458	10	2921	9446	93
2915	9459	24	2921	9447	1
2915	9500	1	2921	9448	9
2915	9501	3	2921	9449	16
2915	9502	2	2921	9450	10
2916	9450	1	2921	9451	7
2916	9451	5	2921	9452	12
2916	9452	8	2921	9453	7
2916	9453	18	2921	9454	1
2916	9454	17	2922	9446	3
2916	9455	28	2922	9447	4
2916	9456	36	2922	9448	5
2916	9457	19	2922	9449	20
2916	9458	13	2922	9450	10
2916	9459	26	2922	9451	11
2916	9500	2	2922	9452	6
2917	9435	1	2922	9453	1
2917	9450	6	2923	9445	14
2917	9451	9	2923	9446	10
2917	9452	33	2923	9447	5
2917	9453	3	2923	9448	3
2917	9454	2	2923	9449	6
2917	9455	9	2923	9450	22
2917	9456	10	2923	9451	53
2917	9457	8	2923	9452	9

Samples in 1-min grids, 3/7

lat	long				
2923	9453	2	2927	9445	7
2924	9442	1	2927	9446	3
2924	9443	1	2927	9447	10
2924	9444	6	2927	9448	13
2924	9445	16	2927	9449	10
2924	9446	9	2927	9450	40
2924	9447	12	2927	9451	6
2924	9448	7	2927	9452	50
2924	9449	3	2927	9453	24
2924	9450	37	2927	9454	33
2924	9451	68	2927	9455	58
2924	9452	7	2927	9456	31
2924	9453	25	2927	9457	3
2924	9456	2	2927	9458	8
2925	9442	4	2927	9459	1
2925	9443	27	2928	9436	4
2925	9444	10	2928	9437	17
2925	9445	9	2928	9438	11
2925	9446	10	2928	9439	16
2925	9447	17	2928	9440	19
2925	9448	12	2928	9441	39
2925	9449	5	2928	9442	58
2925	9450	8	2928	9443	55
2925	9451	11	2928	9444	43
2925	9452	10	2928	9445	45
2925	9453	6	2928	9446	11
2925	9454	17	2928	9447	5
2925	9455	6	2928	9448	17
2925	9456	39	2928	9449	47
2925	9457	18	2928	9450	10
2925	9511	1	2928	9451	1
2926	9441	2	2928	9452	7
2926	9442	4	2928	9453	10
2926	9443	7	2928	9454	17
2926	9444	7	2928	9455	64
2926	9445	4	2928	9456	39
2926	9446	9	2928	9457	34
2926	9447	4	2928	9458	1
2926	9448	5	2928	9459	1
2926	9449	10	2929	9432	1
2926	9450	9	2929	9434	3
2926	9451	3	2929	9435	21
2926	9452	47	2929	9436	27
2926	9453	47	2929	9437	11
2926	9454	65	2929	9438	36
2926	9455	10	2929	9439	59
2926	9456	13	2929	9440	6
2926	9458	1	2929	9441	9
2927	9431	1	2929	9442	28
2927	9439	1	2929	9443	45
2927	9440	5	2929	9444	67
2927	9441	43	2929	9445	31
2927	9442	53	2929	9446	45
2927	9443	9	2929	9447	34
2927	9444	9	2929	9448	35

Samples in 1-min grids, 4/7

lat	long				
2929	9449	51	2931	9449	41
2929	9450	47	2931	9450	42
2929	9451	50	2931	9451	44
2929	9452	40	2931	9452	45
2929	9453	42	2931	9453	25
2929	9454	38	2931	9454	56
2929	9455	5	2931	9455	6
2929	9459	1	2931	9456	7
2930	9430	2	2931	9457	6
2930	9431	1	2931	9458	10
2930	9432	3	2931	9459	55
2930	9435	43	2931	9500	9
2930	9436	35	2931	9504	1
2930	9437	9	2932	9430	12
2930	9438	8	2932	9431	2
2930	9439	43	2932	9432	7
2930	9440	42	2932	9433	9
2930	9441	20	2932	9434	13
2930	9442	16	2932	9435	7
2930	9443	5	2932	9436	9
2930	9444	17	2932	9437	29
2930	9445	75	2932	9438	63
2930	9446	12	2932	9439	35
2930	9447	47	2932	9440	47
2930	9448	24	2932	9441	42
2930	9449	68	2932	9442	1
2930	9450	39	2932	9443	2
2930	9451	50	2932	9445	4
2930	9452	33	2932	9446	2
2930	9453	56	2932	9447	10
2930	9454	41	2932	9448	31
2930	9455	41	2932	9449	61
2930	9456	53	2932	9450	49
2930	9457	33	2932	9451	9
2930	9458	16	2932	9452	4
2930	9459	14	2932	9453	39
2931	9430	7	2932	9454	33
2931	9431	11	2932	9455	10
2931	9432	32	2932	9456	6
2931	9433	14	2932	9457	8
2931	9434	13	2932	9458	14
2931	9435	44	2932	9459	9
2931	9436	73	2932	9500	17
2931	9437	11	2932	9501	6
2931	9438	12	2932	9502	3
2931	9439	21	2932	9504	3
2931	9440	56	2933	9431	11
2931	9441	44	2933	9432	14
2931	9442	28	2933	9433	3
2931	9443	44	2933	9434	9
2931	9444	30	2933	9435	3
2931	9445	14	2933	9436	13
2931	9446	26	2933	9437	1
2931	9447	67	2933	9438	2
2931	9448	36	2933	9440	1

Samples in 1-min grids, 5/7

lat	long				
2933	9444	1	2935	9455	5
2933	9445	23	2935	9456	2
2933	9446	52	2935	9457	7
2933	9447	41	2935	9458	43
2933	9448	13	2935	9459	25
2933	9449	5	2935	9502	5
2933	9450	5	2935	9503	1
2933	9451	8	2936	9437	2
2933	9452	11	2936	9442	5
2933	9453	9	2936	9443	30
2933	9454	20	2936	9444	11
2933	9455	15	2936	9445	8
2933	9456	5	2936	9446	12
2933	9457	11	2936	9447	4
2933	9458	48	2936	9448	23
2933	9459	5	2936	9449	9
2933	9500	41	2936	9450	23
2933	9501	30	2936	9451	57
2933	9502	12	2936	9452	37
2933	9503	11	2936	9453	4
2933	9504	24	2936	9454	9
2934	9432	6	2936	9455	11
2934	9433	5	2936	9456	7
2934	9434	9	2936	9457	34
2934	9443	1	2936	9458	51
2934	9444	10	2936	9459	9
2934	9445	11	2936	9500	2
2934	9446	13	2937	9442	14
2934	9447	9	2937	9443	15
2934	9448	6	2937	9444	7
2934	9449	11	2937	9445	7
2934	9450	6	2937	9446	5
2934	9451	9	2937	9447	13
2934	9452	14	2937	9448	8
2934	9453	3	2937	9449	9
2934	9454	8	2937	9450	47
2934	9455	3	2937	9451	5
2934	9456	9	2937	9452	10
2934	9457	13	2937	9453	13
2934	9458	36	2937	9454	7
2934	9459	54	2937	9455	5
2934	9500	17	2937	9456	9
2934	9504	1	2937	9457	2
2935	9443	5	2937	9458	13
2935	9444	14	2937	9459	42
2935	9445	46	2937	9500	7
2935	9446	7	2938	9441	1
2935	9447	7	2938	9442	45
2935	9448	25	2938	9443	4
2935	9449	63	2938	9444	9
2935	9450	6	2938	9445	12
2935	9451	42	2938	9446	8
2935	9452	7	2938	9447	11
2935	9453	7	2938	9448	6
2935	9454	6	2938	9449	4

Samples in 1-min grids, 6/7

lat	long				
2938	9450	11	2941	9444	6
2938	9451	19	2941	9445	7
2938	9452	63	2941	9446	15
2938	9453	21	2941	9447	12
2938	9454	80	2941	9448	6
2938	9455	12	2941	9449	5
2938	9456	12	2941	9450	19
2938	9457	6	2941	9451	14
2938	9458	7	2941	9452	1
2938	9459	4	2941	9454	1
2938	9500	26	2941	9455	3
2938	9501	2	2941	9456	17
2939	9430	1	2941	9457	25
2939	9440	1	2941	9458	22
2939	9441	9	2941	9459	7
2939	9442	23	2941	9500	4
2939	9443	8	2941	9501	8
2939	9444	9	2942	9431	1
2939	9445	13	2942	9440	1
2939	9446	5	2942	9441	8
2939	9447	7	2942	9442	6
2939	9448	11	2942	9443	9
2939	9449	8	2942	9444	5
2939	9450	33	2942	9445	8
2939	9451	43	2942	9446	4
2939	9452	45	2942	9447	9
2939	9453	12	2942	9448	7
2939	9454	41	2942	9449	7
2939	9455	20	2942	9450	10
2939	9456	11	2942	9451	18
2939	9457	15	2942	9455	1
2939	9458	7	2942	9458	9
2939	9459	12	2942	9459	6
2939	9500	6	2942	9500	2
2940	9441	19	2942	9501	5
2940	9442	11	2942	9502	11
2940	9443	7	2942	9503	3
2940	9444	6	2943	9437	1
2940	9445	11	2943	9440	1
2940	9446	5	2943	9441	7
2940	9447	7	2943	9442	2
2940	9448	9	2943	9443	6
2940	9449	9	2943	9444	7
2940	9450	6	2943	9445	13
2940	9451	17	2943	9446	24
2940	9452	23	2943	9447	6
2940	9455	15	2943	9448	7
2940	9456	46	2943	9449	4
2940	9457	15	2943	9450	19
2940	9458	48	2943	9451	1
2940	9459	11	2943	9452	1
2941	9441	19	2943	9459	1
2941	9442	4	2943	9500	1
2941	9443	3	2943	9501	3

Samples in 1-min grids, 7/7

lat	long	
2943	9502	2
2944	9440	1
2944	9441	24
2944	9442	6
2944	9443	1
2944	9444	6
2944	9445	16
2944	9446	12
2944	9447	16
2944	9448	9
2944	9449	16
2944	9450	2
2944	9501	2
2944	9502	5
2944	9503	4
2944	9504	1
2945	9441	3
2945	9443	1
2945	9445	4
2945	9446	2
2945	9447	5
2945	9449	6
2945	9451	1
2945	9402	3
2945	9503	9
2945	9504	1
2946	9432	1
2946	9441	1
2946	9446	3
2946	9447	2
2946	9455	1
2946	9502	5
2946	9503	3
2946	9504	2

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-680

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMUG007

PROJECT NAME: Minello zooplankton West Bay 76
OBJECTIVE: zooplankton communities in West Bay
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: plankton, zooplankton, ecology

SOURCE: Minello & Matthews (1981), Texas A&M at Galveston

CONTACT: Texas A&M University
P.O. Box 1675
Galveston, TX 77553

409-740-4403

GENERAL TYPE: Zooplankton tows, hydrography

GEOGRAPHICAL COVERAGE: West Bay

PERIOD OF COVERAGE: 13-15 April 1976

MEASUREMENTS: Plankton tows every four hours for 44 hour duration, salinity, temperature & tide (Pier 21)

FORMAT: Graphical and tabular

COMMENTS: On station occupied, out from Auzsion Bayou, W of S Deer Island, approx. 29° 16, 94° 56, depth 1.8 m. Each 4-hourly run consisted of 3 oblique tows/ 0.5m conical net of 241 um mesh Nitex. Surface temperature and salinity measured during each tow. Lag of 2.25 hours used to correct Pier 21 data to that of the site. Pier 21 tide range about 0.50 m. Densities of four categories of organisms determined, total zoop, *Acartia tonsa*, *Pseudodiaptomus coronatus* and barnacle nauplii. Published in:

Minello, Thomas J. and G. A. Matthews, 1981: Variability of zooplankton tows in a shallow estuary. *Contr. Mar. Sci., 24*, 81-92.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-685

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMT001

PROJECT NAME: Bolivar Spartina 76-78
OBJECTIVE: Distribution & growth of Spartina, natural & transplanted
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
D3. Loss of wetlands
D4. Use of littoral property
KEYWORDS: cordgrass, Spartina, vegetation, marshes, ecology

SOURCE: Texas A&M, Tanner (1979)

CONTACT: Texas A&M University
P.O. Box 1675
Galveston, TX 77553

409-740-4403

GENERAL TYPE: Biological

GEOGRAPHICAL COVERAGE: Bolivar Peninsula, beach front

PERIOD OF COVERAGE: January 1976 - May 1978

MEASUREMENTS: Culm density along four 100 ft transects, by sampling 20 0.5m^2 areas randomly along the transect, in each of which live culms (as determined by green color) were counted, culm height and seed stalk density were measured. Above- and below-ground biomass sampled at the end of the first growing season, using a circular core sampler. Each month, standing biomass was harvested at ground level in 5 randomly located 0.25 m^2 areas.

FORMAT: Tabular

COMMENTS: Tidal inundation was the principal control used to explicate the observed Spartina growth. Station location: 29° 22.5 , 94° 45.0 Published in

Tanner, G. W., 1979: Growth of *Spartina alterniflora* within native and transplant-established stands on the upper-Texas Gulf coast. PhD dissertation, Texas A&M University (Range Science)

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-690

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAM0001
PROJECT NAME: Bolivar Spartina 76-78 fauna
OBJECTIVE: Determine effect of small animals on spartina
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
D3. Loss of wetlands
KEYWORDS: beach, cordgrass, Spartina, fauna, ecology

SOURCE: Texas A&M, Stickney and Williamson (1979)

CONTACT:

GENERAL TYPE: Biological

GEOGRAPHICAL COVERAGE: Bolivar Peninsula, beach front

PERIOD OF COVERAGE: January 1976 - May 1978

MEASUREMENTS: Photographic records monthly of activity of small animals on dredge materials, as function of elevation in intertidal zone.

FORMAT: Tabular

COMMENTS: Part of USCE-sponsored project on beneficial uses of dredged material.

Site general location: 29° 22.5 , 94° 45.0

Published in:

Stickney, R. and J. Williamson, 1979: Nondestructive documentation of anima activity on planted and unplanted dredge material. *Texas J. Sci., 31* (2) 161-169.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-695

DATA INVENTORY INFORMATION
GBNEP Reference Number: TPWD003

PROJECT NAME: Spotted seatrout 76-81
OBJECTIVE: Tag-recapture experiment in Bastrop Bay
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C2. Fisheries depletion
KEYWORDS: fish, spotted seatrout, ecology

SOURCE: Texas Parks & Wildlife, Baker et al. (1986)

CONTACT: Al Green
3003 S. IH 35, Suite 320
Austin TX 78704

512-448-4313

GENERAL TYPE: Biological

GEOGRAPHICAL COVERAGE: Bastrop bayou, West Bay, Christmas Bay, San Luis Pass

PERIOD OF COVERAGE: February 1976 - November 1981

MEASUREMENTS: Tag-recapture experiment. All fish captured for tagging in Bastrop Bayou

FORMAT: Tabular, graphical

COMMENTS: Data reduced statistically for publication.

Baker, W.B., G. Matlock, L. McEachron, A. Green, H. Hegen, 1986: Movement, growth and survival of spotted seatrout tagged in Bastrop Bayou, Texas. *Contr. Mar. Sci. 29*, pp 91-101.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-700

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0005
PROJECT NAME: TAMU Webb cordgrass 77
OBJECTIVE: Effects of oil spill on Spartina
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
A6. Contamination
B2. Contamination of water/sediment
KEYWORDS: cordgrass, Spartina, oil spills, marshes

SOURCE: Webb et al. (1981), Texas A&M University

CONTACT:

GENERAL TYPE: Observations of *Spartina alterniflora* , effects of oil spill

GEOGRAPHICAL COVERAGE: Bolivar Peninsula, Bolivar Roads, North Jetty

PERIOD OF COVERAGE: November 1977 - fall 1978.

MEASUREMENTS: Live & dead stem density, stem height, above-ground biomass, below-ground biomass, photographs, qualitative surveys of re-growth.

FORMAT: Tabular

COMMENTS: Sampling followed barge-tug collision and resulting oil spill on 31 Oct 1977. Surveys of plants in this area had been underway since July 77. Surveys made on:
25 Jul 77 25 Sep 2 Nov 7 Jan 21 Mar 29 May 78
Areas surveyed include Bolivar Peninsula on Bolivar Roads, beachfront on Bolivar Peninsula behind North Jetty.

Published in:

Webb, J.W., G.T. Tanner and B.H. Koerth, 1981: Oil spill effects on smooth cordgrass in Galveston Bay, Texas. *Contr. Mar. Sci., 24*, 107-114.

See also Project: Spartina Bolivar (705)

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-705

DATA INVENTORY INFORMATION
GBNEP Reference Number: MBD0001

PROJECT NAME: Spartina Bolivar 78
OBJECTIVE: compare transplanted & natural Spartina & salinity effects
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
A2. Alteration of salinity
D3. Loss of wetlands
KEYWORDS: cordgrass, marshes, Spartina, wetlands

SOURCE: Marine Biology Dept. Texas A&M Galveston

CONTACT: Range Science Dept
Texas A&M University
College Station 77843

or: Texas A&M University
P.O. Box 1675
Galveston, TX 77553

409-740-4403

GENERAL TYPE: Soil salinity, bay salinity, *Spartina*

GEOGRAPHICAL COVERAGE: Bolivar Peninsula, West Bay along Galveston Island

PERIOD OF COVERAGE: 1 May - 14 August 1978 weekly (Bolivar), 7 July - 14 August weekly (Galveston)

MEASUREMENTS: Soil water samples at 30, 45, 52.5, 60 and 75 cm above MSL analyzed for salinity, bay water salinity, soil characteristics, height (cm) and density (stem/m^2) of Spartina, both transplanted and natural.

FORMAT: tabular

COMMENTS: Bay salinity data not presented.

Published in:

Webb, J., J. Dodd & B. Koerth, 1980: Establishment and growth of grass species transplanted on dredged material. *Tex J. Sci. 32*(3), 217-218.

Webb, J. 1983: Soil water salinity variations and their effects on Spartina alterniflora. *Contr. Mar. Sci., 26*, 1-13.

Webb, J. et al. 1978: Habitat development field investigations, Bolivar Peninsula and upland habitat development site Galveston Bay, Texas. Appendix D: Propagation of vascular plants and post propagation monitoring of botanical soil, aquatic biota, and wildlife resources. USCE, Tech Report D-78-15. Waterways Experiment Station, Vicksburg.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices other than the Methods and Materials sections of the Technical Report.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-710

DATA INVENTORY INFORMATION
GBNEP Reference Number: LIT0002

PROJECT NAME: Fish & salinity, Trinity Bay 1980
OBJECTIVE: Sexual metabolism in Fundulus
DATA USE: research,
PRIORITY PROBLEM:
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: fish, Fundulus, spawning, ecology

SOURCE: Texas A&M University

CONTACT: Kirk Strawn

GENERAL TYPE: Fish, hydrography

GEOGRAPHICAL COVERAGE: Unnamed creek just south of Cedar Bayou discharge, Trinity Bay

PERIOD OF COVERAGE: Feb - Sep 1980 weekly

MEASUREMENTS: Weight & length and gonal weight of *Fundulus grandis*, salinity and temperature.

FORMAT: tabular

COMMENTS: Published as:

Waas, B.P. and K. Strawn, 1983: Seasonal and lunar cycles in gonadosomatic indices and spawning readiness of Fundulus grandis. *Contr. Mar. Sci., 26,* 127-141.

Part of HL&P sponsored studies of the effects of the Cedar Bayou discharge on Trinity Bay, see Cedar Bayou studies/biological.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-715

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAM0001

PROJECT NAME: April Fool Reef 80-81
OBJECTIVE: Food sources for oysters
DATA USE: research
PRIORITY PROBLEM:
A2. Alteration of salinity
A3. Alteration of nutrients
A7. Increased sediment/turbidity
C2. Fisheries depletion
KEYWORDS: Oysters, nutrients, currents

SOURCE: Texas A&M, Soniat, Ray and Jeffrey (1984)

CONTACT: Dr. Sammy Ray
Texas A&M University
P.O. Box 1675
Galveston, TX 77553

409-740-4403

GENERAL TYPE: water quality, hydrography

GEOGRAPHICAL COVERAGE: April Fool Reef, off Eagle Point

PERIOD OF COVERAGE: 5 September 1980 - 3 September 1981, biweekly

MEASUREMENTS: Temperature, mercury in glass thermometer °C
Salinity, refractometer
Transparency, Secchi depth
Current velocity (speed & direction), drogue trajectory
suspended matter from 0.3 m above bottom, pumped and filtered (300um-mesh)
Analyzed for:
dry weight
ash-free dry weight
particulate inorganic matter
chlorophyll a
Methods:
Standard Methods (APHA, 1971)
Practical handbook (Strickland and Parsons, Bull Fish. Res. Bd., 1958)

aliquots further filtered onto 293-mm filters, lipids, carbohydrates and proteins extracted (*J. Mar. Biol. Assn. U.K., 51*, p 659, *J. Biol. Chem., 193*, p 265))

FORMAT: Tabular

COMMENTS: All raw data presented in subject paper:

Soniat, T. M., S. M. Ray, & L. M. Jeffrey, 1984: Components of the seston and possible available food for oysters in Galveston Bay, Texas. *Contr. Mar. Sci. 27*, pp 127-141.

STATION LOCATION: 29 deg 20.0 94 deg 54.0 (April Fool Reef)

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-720

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMU0012

PROJECT NAME: TAMUG West Bay finfish
OBJECTIVE: population & feeding of fish
DATA USE: research
PRIORITY PROBLEM:
A. REDUCTION/ALTERATION OF LIVING RESOURCES
A1. Loss of habitat
A3. Alteration of nutrients
A6. Contamination
B2. Contamination of water/sediment
C2. Fisheries depletion
KEYWORDS: fish, stomach analysis, food chains, ecology

SOURCE: Texas A&M University at Galveston, Alexander (1983)

CONTACT: Department of Marine Biology
Texas A&M University
P.O. Box 1675
Galveston, TX 77553

409-740-4403

GENERAL TYPE: biology

GEOGRAPHICAL COVERAGE: West Bay

PERIOD OF COVERAGE: June-July 1981, biweekly

MEASUREMENTS: Shoreline samples with 7-m bay seine, and 10-mm mesh cast net. Stomachs removed from fish & analyzed for contents.

FORMAT: Average results presented in tabular form for six species, *Cyprinodon variegatus, Fundulus gradis, Menidia peninsulae, Lagodon rhomboides, Leiostomus xanthurus, Mugil cephalus.*

COMMENTS: Published in

Alexander, S., 1983: Summer diet of finfish from nearshore habitats of West Bay, Texas. *Texas J. Sci., 35*(1), 93-95

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-725

DATA INVENTORY INFORMATION
GBNEP Reference Number: TACB001

PROJECT NAME: Craig-Bright Xmas Bay 86
OBJECTIVE: Ecology of hard clam in Christmas Bay
DATA USE: research,
PRIORITY PROBLEM:
A1. Loss of habitat
A2. Alteration of salinity
C2. Fisheries depletion
D2. Bathymetric/circulation changes
D3. Loss of wetlands
KEYWORDS: clam, mollusc, ecology, metabolism

SOURCE: Texas A&M, Craig and Bright (1986)

CONTACT: Dr. Tom Bright
Sea Grant
1716 Briarcrest, Suite 702
Bryan, TX 77802

409-845-3854

GENERAL TYPE: biological, water quality, sediment grain size

GEOGRAPHICAL COVERAGE: Christmas Bay

PERIOD OF COVERAGE: August 1982 - March 1985, periodically

MEASUREMENTS: clam populations, speciation and areal abundance, shell weight, age, growth rate, salinity and temperature (field)

FORMAT:

COMMENTS: Reduced and generalized results given in Craig and Bright (1986). To date, raw data has not been located. Published in :

Craig, M. and Thomas Bright, 1986: "Abundance, age distributions and growth of the Texas hard clam, *Mercenaria mercenaria texana* in Texas bays." *Contr. Mar. Sci. 29*, pp 59-72.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

STATIONS:

Number	*Latitude*		*Longitude*	
	Degs	*Mins*	*Degs*	*Mins*
1	29	3.1	95	10.6
2	29	3.8	95	10.4
3	29	2.7	95	11.2
4	29	3.3	95	11.8
5	29	2.3	95	12.29

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-730

DATA INVENTORY INFORMATION
GBNEP Reference Number: TAMUG006
PROJECT NAME: Clam parasites
OBJECTIVE: Occurrence of trematodes in razor and rangia clams
DATA USE: research,
PRIORITY PROBLEM:
C2. Fisheries depletion
KEYWORDS: clams, trematodes, parasites

SOURCE: Texas A&M University/ Galveston

CONTACT: Texas A&M University
P.O. Box 1675
Galveston, TX 77553

409-740-4403

GENERAL TYPE: Biological, clam parasites

GEOGRAPHICAL COVERAGE: Lower Galveston Bay, no further specificity

PERIOD OF COVERAGE: n/a

MEASUREMENTS: Extraction of cercarial stages of trematodes from razor and rangia clams.

FORMAT: Text and graphics

COMMENTS:

Published in:

Wardle, W.J., 1983: Two new non-ocellate trichocercous cercariae (Digenea: Fellodistomidae) from estuarine bivalved molluscs in Galveston Bay, Texas. *Contr. Mar. Sci. 26*, 15-22.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-735

DATA INVENTORY INFORMATION
GBNEP Reference Number: NMFS001

PROJECT NAME: NMFS marshes 1987
OBJECTIVE: monitor communities & metabolism in salt marshes
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C2. Fisheries depletion
D3. Loss of wetlands
KEYWORDS: fish, crustaceans, shellfish, infauna, benthos, ecology

SOURCE: National Marine Fisheries Service, Zimmerman et al. (1990)

CONTACT: Dr. R.J. Zimmerman
National Marine Fisheries Service
Galveston Laboratory
4700 Ave. U
Galveston, TX 77551

(409)-766-3500.

GENERAL TYPE: Biology, water quality

GEOGRAPHICAL COVERAGE: West Bay, Christmas Bay, Trinity River Delta, Smith Point in Trinity Bay, Moses Lake

PERIOD OF COVERAGE: April - November 1987, at four-month intervals

MEASUREMENTS:

Field dissolved oxygen	YSI 51B meter
salinity	American Optical refractometer
(checked versus Hydrolab Datasonde at lab)	
turbidity	HR Instr. Model DRT 15

Fish - species, numbers, lengths
Crustaceans - species, numbers, dimensions
Infauna - species (in 1 of 4 replicates), numbers
epifauna - species (in 1 of 4 replicates), numbers
Biological samples collected by NMFS drop sampler

FORMAT: Tabular in Zimmerman et al (1990). Also, data digitized in dBase III+.

COMMENTS: Published as:

Zimmerman, R., T. Minello, M. Castiglione, & D. Smith, 1990: Utilization of marsh and associated habitats along a salinity gradient in Galveston Bay. NOAA Tech. Memo. NMFS-SEFC-250, National Marine Fisheries Service, Galveston Laboratory.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

NMFS Sampling Stations:

Station	*Description*	*Latitude*		*Longitude*	
		Deg	*Min*	*Deg*	*Min*
SITE 1	Trinity delta	29	45.92	94	43.22
SITE 2	Trinity delta	29	46.14	94	41.76
SITE 3	Smith Point (N shore)	29	33.66	94	45.29
SITE 4	Moses Lake	29	26.00	94	55.43
SITE 5	Jamaica Beach	29	12.5	94	59.0
SITE 6	Christmas Bay	29	02.6	95	10.6

GALVESTON BAY
NATIONAL ESTUARY PROGRAM
DATA INVENTORY PROJECT

DATA SET REPORT-740

DATA INVENTORY INFORMATION
GBNEP Reference Number: NMFS002

PROJECT NAME: NMFS oyster reef 88-89
OBJECTIVE: survey habitat function of oyster reef
DATA USE: research
PRIORITY PROBLEM:
A1. Loss of habitat
C2. Fisheries depletion
D2. Bathymetric/circulation changes
D3. Loss of wetlands
KEYWORDS: fish, oysters, reefs, shellfish, benthos, ecology

SOURCE: National Marine Fisheries Service, Zimmerman et al. (1989)

CONTACT: Dr. R.J. Zimmerman
National Marine Fisheries Service
Galveston Laboratory
4700 Ave. U
Galveston, TX 77551

(409)-766-3500.

GENERAL TYPE: Biology

GEOGRAPHICAL COVERAGE: West Bay, Confederate Reef

PERIOD OF COVERAGE: December 1988, July 1989

MEASUREMENTS:
Fish - species, numbers, lengths
Crustaceans - species, numbers, dimensions
Infauna - species, numbers
epifauna - species, numbers
Biological samples collected by NMFS drop sampler and verified with 10-cm-dia cores.

FORMAT: Tabular in Zimmerman et al (1989). Also, data digitized in dBase III+.

COMMENTS: Published as:

Zimmerman, R., T. Minello, T. Baumer, & M. Castiglione, 1989: Oyster reef as habitat for estuarine macrofauna. NOAA Tech. Memo. NMFS-SEFC-249, National Marine Fisheries Service, Galveston Laboratory.

Sample station locations not presented.

QUALITY ASSURANCE/QUALITY CONTROL: No formal QA/QC plan exists, and no information is available as to QA/QC practices.

CROSS-REFERENCE
BIOLOGY & ECOLOGY

Data sets with additional or ancillary information:

Data Set Report- 055
Data Set Report- 090
Data Set Report- 150
Data Set Report- 198
Data Set Report- 207
Data Set Report- 220
Data Set Report- 245
Data Set Report- 280
Data Set Report- 305
Data Set Report- 315
Data Set Report- 330
Data Set Report- 355
Data Set Report- 365
Data Set Report- 373
Data Set Report- 390
Data Set Report- 405
Data Set Report- 755

Data Set Report - 075
Data Set Report - 100
Data Set Report - 155
Data Set Report - 200
Data Set Report - 215
Data Set Report - 233
Data Set Report - 255
Data Set Report - 285
Data Set Report - 310
Data Set Report - 325
Data Set Report - 335
Data Set Report - 358
Data Set Report - 370
Data Set Report - 380
Data Set Report - 395
Data Set Report - 745
Data Set Report - 800