Identification_Information:
  Citation:
    Citation_Information:
      Originator: NOAA Fisheries Service
      Publication_Date: 20060727
      Title:
        Wetland usage patterns by nekton in the Galveston
        Bay system of Texas: Distributions, landscape patterns
        and restoration implications: Spring and Fall 1995.
  Description:
    Abstract:
      Measured fine-scale distributions of nekton on the
      vegetated marsh surface using drop samplers and
      utilized these patterns to estimate population size.
      Natant decapod crustaceans were most abundant in the marsh,
      while densities of juvenile brown shrimp, white shrimp
      and blue crabs were highest 1-m from the marsh edge
      interface, declining rapidly towards open water.
      Developed regression models to describe fine-scale
      density patterns and used this information to
      estimate the population of natant decapods in a
      highly fragmented marsh in the Galveston Bay system.
    Purpose:
      To identify and describe the relationship between
      fishery productivity and the coastal environment.
  Time_Period_of_Content:
    Time_Period_Information:
      Range_of_Dates/Times:
        Beginning_Date: 19850530
        Ending_Date: 19851004
    Currentness_Reference: ground condition
  Status:
    Progress: Complete
    Maintenance_and_Update_Frequency: As needed
  Spatial_Domain:
    Bounding_Coordinates:
      West_Bounding_Coordinate: -94.9803
      East_Bounding_Coordinate: -94.6689
      North_Bounding_Coordinate: 29.4784
      South_Bounding_Coordinate: 29.2077
  Keywords:
    Theme:
      Theme_Keyword_Thesaurus:
      Theme_Keyword: distribution
      Theme_Keyword: abundance
      Theme_Keyword: habitat
      Theme_Keyword: nekton
      Theme_Keyword: wetlands
      Theme_Keyword: drop sampler
      Theme_Keyword: Spartina alterniflora
      Theme_Keyword: brown shrimp
      Theme_Keyword: white shrimp
      Theme_Keyword: pink shrimp
      Theme_Keyword: Farfantepenaeus aztecus
      Theme_Keyword: Litopenaeus setiferus
      Theme_Keyword: Farfantepenaeus duorarum
      Theme_Keyword: macrofauna

Theme_Keyword: salt marsh
Theme_Keyword: restoration
Theme_Keyword: fish
Theme_Keyword: shrimp
Theme_Keyword: blue crabs
Theme_Keyword: decapods
Place:
Place_Keyword_Thesaurus: Galveston Bay
Place_Keyword: Gang's Bayou
Place_Keyword: West Bay
Place_Keyword: Texas
Place_Keyword: Gulf of Mexico
Access_Constraints:
Use_Constraints:
Data set is not for use in litigation. While
efforts have been made to ensure that these data
are accurate and reliable, NOAA cannot assume
liability for any damages or misrepresentations
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Point_of_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization:
NOAA Fisheries Service, formerly National Marine
Fisheries Service, Fishery Ecology Branch.
Contact_Person: Dr. Jim Ditty
Contact_Address:
Address_Type: mailing and physical
Address: Galveston Laboratory, 4700 Avenue U
City: Galveston
State_or_Province: Texas
Postal_Code: 77551-5997
Country: Unites States of America
Contact_Voice_Telephone: 409-766-3500
Data_Quality_Information:
Attribute_Accuracy:
Attribute_Accuracy_Report:
Data were entered into spreadsheets and checked
against the raw data sheet to avoid entry errors.
Logical_Consistency_Report:
Completeness_Report:
Lineage:
Process_Step:
Process_Description:
Sampling Gear:
The 1.14 m diameter cylindrical drop trap was a
fiberglass enclosure with a galvanized metal skirt.
Traps enclosed a 1-m2 area and were deployed
from a boat with a front-mounted boom.
Process_Date: unknown
Process_Step:
Process_Description:
Measuring Environmental Variables:
Environmental data were collected immediately after

gear deployment and before collection of animals. Water temperature, salinity, and D.O. data were collected within the sampler. A water sample was also collected and returned to the laboratory for turbidity analysis. Minimum and maximum water depth was taken with a meter stick and recorded to the nearest centimeter. Water depth was considered the midpoint between values. Field sheets were checked to ensure all required environmental data were recorded correctly.

Process_Date: unknown

Process_Step:

Process_Description:

Sampling of Nekton and Associated Plants:

The engine was turned off once the boat approached the sampling site to minimize site disturbance prior to sampling. The boat drifted or was slowly guided to the sampling site by pushing from the stern. One person in the boat either tossed or released the trap from the bow. Immediately after drop sampler deployment, field personnel pushed the sampler approximately 15 cm into the sediment to obtain a proper seal along the bottom of the trap to prevent a blow-out and escape of organisms.

Process_Date: unknown

Process_Step:

Process_Description:

Removal of Animals:

After the drop trap was pushed into the substrate, dip nets were used to sweep the bottom of the trap and remove the nekton. Enclosed water was pumped from the trap and filtered through a 1.0 mm mesh plankton net. As the water level dropped, the sampler was continually swept with dip nets because the efficiency of animal capture increases with reduced water depth. Once drained, the sediment was visually and manually inspected for animals remaining on or burrowed into the substrate. Animals taken in dip nets or found during substrate inspection were added to the drop trap catch. Animals and other material (i.e., vegetation, macro-algae, shell hash, and detritus) pumped into the cod end of the plankton net were rinsed and the catch bag was detached. Samples were placed in a 1.0 mm mesh bag, labeled, fixed, and returned to the laboratory for processing.

Process_Date: unknown

Process_Step:

Process_Description:

Care of Nekton Samples in the Field:

Labeled shipping tags were placed inside and attached to the outside of each 1.0 mm mesh sample bag. Samples were stored in 3 or 5 gallon buckets containing ten percent formalin.

Ten percent formalin was made by mixing one part full-strength formaldehyde with nine parts water.

Process_Date: unknown

Process_Step:

Process_Description:

Initial Processing of Field Data and Samples:

After returning from the field, samples were recorded in the laboratory log book. The log book served as a sample inventory and verification of sample arrival and condition. Field data sheets were entered into an electronic database or database manager and copies of the original field data

sheets were provided to the primary investigator (PI).
Entered data were checked and verified against field sheets.
Process_Date: unknown
Process_Step:
Process_Description:
SPECIES IDENTIFICATION AND MEASUREMENT:
Organisms were measured to the nearest millimeter to determine total length (TL) or total carapace width (CW). Fish were measured after being placed flat on their side with the mouth closed. TL was the distance from the snout to the tip of the longest caudal fin ray. TL of penaeid shrimp was measured from the tip of the rostrum to the tip of telson. If the rostrum was broken, TL was not measured. Carapace width (CW) of blue crabs was measured across the widest part of the carapace (from tip to tip of the lateral spines, if present). If lateral spines were broken, CW was not measured. Hermit crabs were not measured.
Process_Date: unknown
Process_Step:
Process_Description:
Preservation and Storage of Fish and Invertebrates:
After sorting and identification, organisms were preserved in 10 percent formaldehyde for long-term storage.
Process_Date: unknown
Process_Step:
Process_Description:
Organism Data Entry and Validation:
Laboratory and field data were entered into the computer using a database manager and a text file was developed to described these data and any abbreviated variables. The data were printed out and checked against ID sheets to ensure all information was correct. Data corrections were made at this time.
Process_Date: unknown
Metadata_Reference_Information:
Metadata_Date: 20060727
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: NOAA Fisheries Service, Fishery Ecology Branch, Galveston, Texas
Contact_Person: Dr. Jim Ditty
Contact_Address:
Address_Type: mailing and physical
Address: Galveston Laboratory, 4700 Avenue U
City: Galveston
State_or_Province: Texas
Postal_Code: 77551-5997
Country: Unites States of America
Contact_Voice_Telephone: 409-766-3500
Metadata_Standard_Name:
FGDC Content Standard for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001.1-1999