Identification_Information:
 Citation:
  Citation_Information:
   Originator: NOAA Fisheries Service
   Publication_Date: 20060805
   Title:
    Abundance patterns of macrofauna and infauna in
    nursery habitats of Christmas Bay, Texas: July 1984
    through June 1985.
 Description:
  Abstract:
   Between July 1984 and June 1985, monthly samples were
   collected from marsh, seagrass, and nonvegetated
   habitats in Christmas Bay and West Bay in the Galveston
   Bay system. Sampling consisted of sets of eight
   replicates in each of four habitat types: marsh, seagrass,
   inner margin of seagrass bed adjacent to marsh and
   outer margin of seagrass bed adjacent to subtidal
   unvegetated sand bottom. Although seagrass is the preferred
   habitat for blue crabs <40 mm carapace length, seagrass
   is uncommon in the NW Gulf. Consequently, blue crabs use
   salt marsh as additional nursery areas.
  Purpose:
   Identify and describe the relationship
   between fishery productivity and the
   coastal environment. Specifically, to examine
   distribution patterns of juvenile blue crabs
   among salt marsh, seagrass, and nonvegetated
   habitats.
 Time_Period_of_Content:
  Time_Period_Information:
   Range_of_Dates/Times:
    Beginning_Date: 19840721
    Ending_Date: 19850625
  Currentness_Reference: ground condition
 Status:
  Progress: Complete
  Maintenance_and_Update_Frequency: As needed
 Spatial_Domain:
  Bounding_Coordinates:
   West_Bounding_Coordinate: -95.2300
   East_Bounding_Coordinate: -95.1500
   North_Bounding_Coordinate: 29.0800
   South_Bounding_Coordinate: 29.0300
 Keywords:
  Theme:
   Theme_Keyword_Thesaurus:
   Theme_Keyword: distribution
   Theme_Keyword: abundance
   Theme_Keyword: predator

Theme_Keyword: prey
Theme_Keyword: estuarine dependent
Theme_Keyword: 1.8 m diameter cylindrical drop sampler
Theme_Keyword: submerged aquatic vegetation
Theme_Keyword: nekton
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: nursery habitat
Theme_Keyword: salt marsh
Theme_Keyword: fish
Theme_Keyword: shrimp
Theme_Keyword: crabs
Theme_Keyword: invertebrates
Place:
Place_Keyword_Thesaurus: Christmas Bay
Place_Keyword: Texas
Place_Keyword: Galveston Bay system
Place_Keyword: Gulf of Mexico
Access_Constraints:
Use_Constraints:
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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
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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 1.8 m cylindrical diameter drop trap was a fiberglass enclosure with a galvanized metal skirt. The 1.8 m drop trap enclosed a 2.6 m2 area. Traps 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 and a water sample was returned to the lab for turbidity analysis. Minimum and maximum water depth was 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, preserved, and returned to the laboratory for processing.
Process_Date: unknown

Process_Step:
Process_Description:
Care of Nekton Samples in the Field:
Labeled, waterproof 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 10 percent formalin at the end of the sampling day. 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 in sequential order. The log book served as a sample inventory and to verify sample arrival and condition. Field data sheets were entered into an electronic database or a database manager. 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:
Blue crabs were divided into 5 mm size classes. A single measurement was taken on crabs. Carapace width (CW) 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. Penaeids were measured in mm total length (TL) and fish were recorded in 10 mm size intervals.
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
Metadata_Reference_Information:
Metadata_Date: 20060805
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization:
NOAA Fisheries Service, National Marine Fisheries Service, Fishery Ecology Branch, Galveston, Texas
Contact_Person: Dr. Jim Ditty
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Address_Type: mailing and physical
Address: Galveston Laboratory, 4700 Avenue U
City: Galveston
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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