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Identification_Information:
  Citation:
    Citation_Information:
      Originator: NOAA Fisheries Service
      Publication_Date: 20060105
      Title:
        Macrofaunal and infaunal samples
        collected from Chocolate Bay, Texas:
        Spring 1987, and Spring and Fall of 1988.
  Description:
    Abstract:
      During May 1987, and May-June and September
      1988, a total of 80 inner and outer marsh
      samples were collected in the Alligator
      Point salt marsh in Chocolate Bay within the
      Galveston Bay system of Texas. The objective
      was to examine the relationship between marsh edge
      and animal use in a planted Spartina marsh.
      Overall, the study indicates that habitat
      value of created salt marshes can be enhanced by
      incorporating tidal creeks into the marsh design.
    Purpose:
      Identify and describe the relationship
      between fishery productivity and the
      coastal environment.
  Time_Period_of_Content:
    Time_Period_Information:
      Multiple_Dates/Times:
        Single_Date/Time:
          Calendar_Date: 19870528
        Single_Date/Time:
          Calendar_Date: 19880531
        Single_Date/Time:
          Calendar_Date: 19880601
        Single_Date/Time:
          Calendar_Date: 19880920
        Single_Date/Time:
          Calendar_Date: 19880921
        Single_Date/Time:
          Calendar_Date: 19880922
    Currentness_Reference: ground condition
  Status:
    Progress: complete
    Maintenance_and_Update_Frequency: As required
  Spatial_Domain:
    Bounding_Coordinates:
      West_Bounding_Coordinate: -95.190
      East_Bounding_Coordinate: -95.110
      North_Bounding_Coordinate: 29.220
      South_Bounding_Coordinate: 29.160
  Keywords:
    Theme:
      Theme_Keyword_Thesaurus:
      Theme_Keyword: distribution
      Theme_Keyword: abundance
      Theme_Keyword: predator
      Theme_Keyword: prey
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      Theme_Keyword: estuarine dependent
      Theme_Keyword: drop sampler
      Theme_Keyword: submerged aquatic vegetation
      Theme_Keyword: dredge disposal
      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
      Theme_Keyword: salt marsh
      Theme_Keyword: fish
      Theme_Keyword: shrimp
      Theme_Keyword: crabs
      Theme_Keyword: invertebrates
    Place:
      Place_Keyword_Thesaurus:
      Place_Keyword: Alligator Point
      Place_Keyword: Chocolate Bay
      Place_Keyword: Halls Lake
      Place_Keyword: Galveston Bay estuary
      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 caused
    by inaccuracies in these data, or as a result of these data being
    used on a particular system. NOAA makes no warranty, expressed or
    implied, nor does distribution constitute any such warranty.
  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:
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    Process_Description:
      Sampling Gear Description:
      The drop trap was a 1.8 m diameter cylindrical
      fiberglass enclosure with a galvanized metal skirt
      along the bottom. Drop traps 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. Distance from the
      center
      of the sampling gear to the edge of the marsh was estimated for each
      sampling period. 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 taken with a meter stick and recorded to the nearest centimeter.
      Average water depth was considered the midpoint value.
    Process_Date: unknown
  Process_Step:
    Process_Description:
      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 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 escape of organisms and trap blow-out. A 10-cm
      diameter sediment core that included a clump of Spartina in the
      vegetated samples was taken from within each drop sample (near the
      center) to collect small benthic infauna and epifauna. The upper
      5-cm of sediment and lower 5-cm of plant stems in the core sample
      were washed on a 0.5-mm sieve, and the animals and plant material
      retained were preserved in formalin and returned to the laboratory.
      The remaining macrophytes enclosed in the sampler were clipped
      at ground level and removed to assist in organism retrieval.
    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 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,
      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 plankton net cod end
      were rinsed and the catch bag detached. Samples were placed
      in a 1.0 mm mesh bag, labeled, preserved, and returned to the
      laboratory for processing.
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      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. Ten percent
        formalin was made by mixing one part full-strength formaldehyde with
        nine parts water. If animals were too large to fit into the sample
        bag, the specimen was identified to the lowest taxon, measured,
        recorded, and released.
      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 to verify sample arrival and condition.
        Sediment samples were organized by number and refrigerated or
        frozen until processed. Turbidity samples were analyzed upon return
        to the lab, and the information was transferred to the field data
        sheets. Field data sheets were entered into an electronic database,
        or a database manager. A printout was given to the primary
        investigator for review.
      Process_Date: unknown
    Process_Step:
      Process_Description:
        SPECIES IDENTIFICATION AND MEASUREMENT:
        Penaeid shrimp were measured to the nearest millimeter
        total length (TL). 'Other decapods' were measured and
        placed in the nearest 5 mm TL or carapace width (CW) interval.
        Fish were measured to the nearest 10 mm TL.
        Each fish was measured after being placed flat on its side
        with its mouth closed. TL in fish was the distance from the snout
        to the tip of the longest caudal fin ray. TL in penaeids 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 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:
        Organism Data Entry and Validation:
        Laboratory and field data were entered into the computer using a
        database manager. A text file was created that described these data
        and any abbreviated variables. Data were printed out and
        checked against ID sheets to ensure all information was correct.
        Data corrections were made at this time. Hard copies of the
        file were given to the PI and stored in the project folder
        along with the original field and laboratory data sheets.
        A code was assigned to each species using the Fishery Ecology
        Branch revised species code list. Species not found on the
        code list were assigned a new code, which was also added to
        the master code file.
      Process_Date: unknown
Entity_and_Attribute_Information:
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  Detailed_Description:
    Entity_Type:
      Entity_Type_Label: Descriptive Information for Sample Sites
      Entity_Type_Definition: Variables relating to collection of flora and fauna
      Entity_Type_Definition_Source:
        NOAA Fisheries Service, National Marine
        Fisheries Service, Fishery Ecology Branch, Galveston, Texas
    Attribute:
      Attribute_Label: Miscellaneous Descriptor
      Attribute_Definition: Description of habitat sampled
      Attribute_Definition_Source:
        NOAA Fisheries Service, National Marine
        Fisheries Service, Fishery Ecology Branch, Galveston, Texas
      Attribute_Domain_Values:
        Enumerated_Domain:
          Enumerated_Domain_Value: Inner Marsh
          Enumerated_Domain_Value_Definition: habitats >30 m from open bay
          Enumerated_Domain_Value_Definition_Source:
            NOAA Fisheries Service, National
            Marine Fisheries Service, Fishery Ecology Branch, Galveston, Texas
        Enumerated_Domain:
          Enumerated_Domain_Value: Outer marsh
          Enumerated_Domain_Value_Definition: habitats nearest open water of bay
          Enumerated_Domain_Value_Definition_Source:
            NOAA Fisheries Service, National
            Marine Fisheries Service, Fishery Ecology Branch, Galveston, Texas
Metadata_Reference_Information:
  Metadata_Date: 20060105
  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
      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
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