

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

### **Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

## **1. General Description of Data to be Managed**

### **1.1. Name of the Data, data collection Project, or data-producing Program:**

Diet of bonnethead shark in eastern Gulf of Mexico

### **1.2. Summary description of the data:**

To examine variation in diet and daily ration of the bonnethead, *Sphyrna tiburo* (Linnaeus, 1758), sharks were collected from three areas in the eastern Gulf of Mexico: northwest Florida (29°40'N, 85°13'W), Anclote Key near Tampa Bay (28°10'N, 82°42.5'W), and Florida Bay (24°50'N, 80°48'W) from March through September, 1998-2000. In each area, diet was assessed by life stage (young-of-the year, juveniles, and adults) and quantified using five indices: percent by number (N), percent by weight (W), frequency of occurrence (O), index of relative importance expressed on a percent basis (IRI), and IRI based on diet category (IRIDC). Diet could not be assessed for young-of-the-year in Tampa Bay or Florida Bay owing to low sample size. Diet analysis showed an ontogenetic shift in northwest Florida. Young-of-the-year stomachs from northwest Florida (n68, 1 empty) contained a mix of seagrass and crustaceans while juvenile stomachs (n82, 0 empty) contained a mix of crabs and seagrass and adult stomachs (n39, 1 empty) contained almost exclusively crabs. Crabs made up the majority of both juvenile and adult diet in Tampa Bay (n79, 2 empty, and n88, 1 empty, respectively). Juvenile stomachs from Florida Bay (n72, 0 empty) contained seagrass and a mix of crustaceans while adult stomachs contained more shrimp and cephalopods (n82, 3 empty). Diets in northwest Florida and Tampa Bay were similar. The diet in Florida Bay was different from those in the other two areas, consisting of fewer crabs and more cephalopods and lobsters. Plant material was found in large quantities in all stomachs examined from all locations (15 IRIDC in 6 of the 7 life stage-area combinations, 30 IRIDC in 4 of the 7 combinations, and 62 IRIDC in young-of-the-year diet in northwest Florida). Using species- and area-specific inputs, a bioenergetic model was constructed to estimate daily ration. Models were constructed under two scenarios: assuming plant material was and was not part of the diet. Overall, daily ration was significantly different by sex, life stage, and region. The bioenergetic model predicted increasing daily ration with decreasing latitude and decreasing daily ration with ontogeny regardless of the inclusion or exclusion of plant material. These results provide evidence that bonnetheads continuously exposed to warmer temperatures have

elevated metabolism and require additional energy consumption to maintain growth and reproduction.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2001 to 2002

**1.5. Actual or planned geographic coverage of the data:**

W: -85.292, E: -82.063, N: 29.978, S: 25.056

Localized Sampling Area

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*

Table (digital)

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)**

**2.1. Name:**

John Carlson

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

John.Carlson@noaa.gov

**2.5. Phone number:**

850-234-6541 x221

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

John Carlson

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?**

No

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

0

**5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

Process Steps:

- Data was entered by hand into the database and saved on a local computer.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:****5.2. Quality control procedures employed (describe or provide URL of description):**

N/A

**6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.7. Data collection method(s)

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:****6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/24912>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

Yes

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?****7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:****7.2. Name of organization of facility providing data access:**

NOAA National Centers for Environmental Information (NCEI)

**7.2.1. If data hosting service is needed, please indicate:**

No

**7.2.2. URL of data access service, if known:**

<https://www.ncei.noaa.gov/archive/accession/0163192/1.1/data/0-data/24912/>

**7.3. Data access methods or services offered:**

Access by URL

**7.4. Approximate delay between data collection and dissemination:**

365

**7.4.1. If delay is longer than latency of automated processing, indicate under what**

**authority data access is delayed:**

## **8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

### **8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

NCEI\_MD

#### **8.1.1. If World Data Center or Other, specify:**

#### **8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

### **8.2. Data storage facility prior to being sent to an archive facility (if any):**

NESDIS National Oceanographic Data Center - Silver Spring, MD

### **8.3. Approximate delay between data collection and submission to an archive facility:**

365

### **8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

The data resides on a secure government network requiring multi-factor authentication for network access.

## **9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*