

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:

ATSH ATL DIET (stomach contents of Atlantic sharpnose shark on east coast of FL (NCEI Accession 0164343)

### 1.2. Summary description of the data:

A reassessment of the diet of the Atlantic sharpnose shark *Rhizoprionodon terraenovae* was conducted to provide an update on their trophic level (n390). *Rhizoprionodon terraenovae* primarily consume teleost fish however, loggerhead sea turtles *Caretta caretta* were also found in the diet for the first reported time. Analysis suggests that calculated trophic level may significantly depend on geographic area, thus adding a new factor to fishery management decisions.

### 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 2005

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

W: -81.113, E: -79.326, N: 30.242, S: 26.648  
Atlantic Ocean, U.S. South

### 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.)

Instrument: Drift Gillnet

Platform: Commercial Florida Shark Gillnet Fishing Fleet

### 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:

- *Rhizoprionodon terraenovae* were collected by onboard National Marine Fisheries Service contract fishery observers in the Florida shark drift gillnet fishery from 2001 to 2005 (n=390). All *R. terraenovae* were collected in areas off the east coast of Florida ranging from 27° 05' to 28° 43' N. A complete description of the observer program and shark processing is detailed in Carlson Bethea (2006). *Rhizoprionodon terraenovae* were randomly selected from the catch, and fork length (LF) and sex were recorded. Stomachs were removed and immediately frozen or stored on ice prior to transport. At the laboratory, stomachs were stored in a large walk-in freezer (c. -12°C) until dissection. Upon dissection, prey items were identified to the lowest possible taxonomic level, counted, measured and weighed wet (with a precision of 0.01 g). A cumulative prey curve was created to determine if sample size was sufficient to accurately describe diet. The order of stomach analysis was randomized 10 times, and the mean number of new prey species found in consecutive stomachs was plotted against the number of non-empty stomachs. The existence of an asymptotic relationship indicates that sample size is adequate to represent overall dietary habits (Cailliet et al., 1986; Ferry Cailliet, 1996). The final 10 values of the cumulative prey curve were significantly different from a slope of 0 ( $t = 4.669$ ,  $P < 0.01$ ), and the slope increased at 589. While greater sampling could yield an even more comprehensive analysis of *R. terraenovae* diet, the slope was only slightly higher than the threshold of 5 (Ferry Cailliet, 1996), indicating that the diets were well described overall. Published 2014. This article is a U.S. Government work and is in the public domain in the USA. *Journal of Fish Biology* 2015, 86, 3853-91. DIET AND TROPHIC ANALYSIS OF *R. TERRAENOVAE* 387. Diet was analysed following Corts (1997) using four standard indices: per cent by number (N), per cent by mass (W), per cent frequency of occurrence (O) (Hyslop, 1980) and the index of relative importance (IRI) (Pianka et al., 1971). The IRI was used to facilitate comparison with previous diet studies and was calculated as  $IRI = \frac{O(N+W)}{O(N+W)}$ . The IRI was then expressed on a per cent basis (IRI Corts, 1997) by summing all IRI values for every prey item and then dividing each individual IRI value by the total. To calculate the TL, the stomach contents were pooled into eight major diet categories: cephalopods, chondrichthyans, decapods, teleosts, invertebrates (excluding decapods and molluscs), molluscs, marine plants and marine reptiles (Corts, 1999). Each prey category was assigned an average trophic level, TL<sub>j</sub>, based on estimates aggregated by Corts (1999) in order to compare values. The TL was expressed as  $TL = 1.8 + \sum P_j TL_j$ , where P<sub>j</sub> is the proportion by IRI of each category. The mean TL calculated for *R. terraenovae* was 4.201, with the teleost prey category comprising 91.03 IRI, followed by invertebrates (excluding decapods) at 26.1 IRI and decapods at 20.0 IRI (Table II). While the majority of fishes in the diet was unidentifiable, the increase in TL from Corts (1999) is due to an increase in fish consumption (66.4 v. 91.0 IRI) over crustaceans (31.6 v. 26 IRI). Comparison of the IRI of the four major prey categories between this study, Gelsleichter et al. (1999), Bethea et al. (2006) and Drymon et al. (2012) shows that results reported by Drymon et al. (2012) and Bethea et al. (2006) closely resemble the findings reported here, with a very high IRI of teleosts. While the percentages were similar, each study reported unique prey items not found in

the other studies, thus demonstrating regional differences.

**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):**

Findings from this dataset are published in a peer-reviewed journal. This is a static data set that has undergone rigorous QA/QC prior to publication.

## 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?**

Yes

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

**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/24914>

**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:**

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

<https://www.ncei.noaa.gov/archive/archive-management-system/OAS/bin/prd/jquery/accession/download>

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

Access via specified 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:**

N/A

## **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):**

National Centers for Environmental Information - Silver Spring, Maryland - Silver Spring, MD

NCEI Archive

**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*

N/A

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

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