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:** Burrowing behavior of penaeid shrimps

### 1.2. Summary description of the data:

Brown shrimp, Farfantepenaeus aztecus, and white shrimp, Litopenaeus setiferus, were held were held under natural light conditions before experiments. Experiments were conducted in twelve rectangular tanks (58 cm x 149 cm) under fluorescent lighting (7-10 microEinsteins/sec/sq m). Shrimp were placed in randomly-assigned tanks the day before observations were initiated at 0730 h, the lights were turned on, and observations of thepercentage of shrimp burrowed ( 1/2 of their body beneath the substrate) were recorded hourly (starting at 0830 h) throughout the daylight hours. For both species, burrowing rates decreased significantly as the substrate became courser. Brown shrimp burrowing was marginally affected by salinity with the lowest burrowing rates at 5 ppt white shrimp burrowing was not significantly affected by salinity. Large brown shrimp burrowed more than small and medium sized shrimp, but size did not significantly affect burrowing of white shrimp. The presence of a fish predator in the tanks did not affect burrowing of either species, but hunger level significantly affected burrowing for both species.

- **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:** 1984 to 2015
- **1.5. Actual or planned geographic coverage of the data:** W: -94.815127, E: -94.815127, N: 29.275417, S: 29.275417 Gulf Of Mexico

# 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: LI-185A Quantum Radiometer Photometer Platform: Tank

### 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:** Tim J Baumer
- **2.2. Title:** Metadata Contact
- 2.3. Affiliation or facility:
- 2.4. E-mail address:

tim.baumer@noaa.gov

**2.5. Phone number:** 409-766-3784

### 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:** James Ditty
- **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:

- After observations of behavior in laboratory experiments, data were entered into an Excel spreadsheet. A text file was created to describe these data and associated variables. Entered data were checked against the laboratory record books to minimize entry errors. The electronic file was also sorted and examined in a variety of ways to look for outliers, missing data, and other potential errors. Verified data files were then saved electronically on the Galveston Laboratory server and backedup as needed.

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):** Log books were used to record shrimp behavior observations from all experiments. When possible, treatments were randomly applied to tanks; the exception was for substrate experiments where different substrates remained in the same tanks throughout the experimental series. Shrimp from holding tanks, however, were randomly placed in tanks during all experiments. Shrimp were moved from holding tanks to experimental tanks in the afternoon on the day before observations were initiated. At 0730 h the next day, the lights came on, and observations on behavior were recorded hourly (starting at 0830 h) throughout the daylight hours (generally 10 hourly observations during the day). Black plastic curtains surrounded each tank, and observations were made through small portals to avoid disturbance. During each hourly observation period, individual shrimp were categorized into one of eight behaviors.

# 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/30679

# 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

# 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:** Southeast Fisheries Science Center (SEFSC)
  - 7.2.1. If data hosting service is needed, please indicate: No
  - 7.2.2. URL of data access service, if known: https://grunt.sefsc.noaa.gov/parr/30679.zip
- 7.3. Data access methods or services offered: Download From Provided Link
- 7.4. Approximate delay between data collection and dissemination: 180

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)

TO\_BE\_DETERMINED

- 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):** Southeast Fisheries Science Center - Miami, FL

### PARR Data Server

- **8.3. Approximate delay between data collection and submission to an archive facility:** 180
- 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.*