

*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:**

Monitoring the diurnal and seasonal foraging of Hawaiian monk seals in mesophotic rubble habitat using seafloor event loggers called "electric rocks."

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

Video from seal-mounted cameras fitted to Hawaiian monk seals showed that seals visited patches of loose mesophotic seafloor rock to flip them and obtain the prey hiding underneath. Diver surveys of rock patches documented 38 species of fish and invertebrates and found 38% of the larger diameter rocks (10-100 cm) flipped with the encrusted live coral and algae side left face down. We developed a set of "electric rocks" (artificial rocks fitted with event loggers) to record the date and time of any movement. We deployed the rocks in multiple clusters on the terraced slope of the seal colony atoll (French Frigate Shoals) close to the beach haulout and at two sites further away on the summits of neighboring banks. The goal was to expand temporal monitoring (diurnally and seasonally) of the seal's use of mesophotic rubble patches without requiring further instrumentation of monk seals. The data from the electric rocks showed patterns consistent with the behavior seen from the seal-mounted video, including rapid rock-to-rock searching and more movements closer to seal haulouts. The electric rocks detected more rock tips on the atoll terrace than on the banks, with higher counts seen during the day at the bank summits. Seasonally, both the terrace and bank detected more movements in summer and fall months consistent with the monk seal's reproductive pupping and molting season than during the rest of the year, suggesting some seasonal change in the foraging habitat of monk seals.

### **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:**

1998-08-24 to 2003-10-31

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

The area of study is the mesophotic terrace outside the north barrier reef of French Frigate Shoals (FFS, 50-80 m) and the mesophotic summits (40-80 m) of Southeast Brooks

Bank and Middle Brooks Bank. The area falls between the Middle Brooks site to the west (N 24° 10.060 W 166° 59.136) and the Trig area at FFS atoll (N 23° 53.364 W 166° 14.376)

**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:**

Frank A Parrish

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:****2.4. E-mail address:**

frank.parrish@noaa.gov

**2.5. Phone number:**

(808)725-5701

**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:**

Frank A Parrish

**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?**

Yes

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

20

**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):*

Lineage Statement:

Data on seal rock flipping behavior from the Crittercam relational database from annotated video from cameras deployed by PIFSC on French Frigate Shoals Monk Seals.

Data on mean hourly wave energy (ht and period) from the CDIP Waimea buoy on the North Shore of Oahu

**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):****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)
- 5.2. Quality control procedures employed
- 7.2. Name of organization of facility providing data access
- 7.4. Approximate delay between data collection and dissemination
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**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/70346>

**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?**

No

**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?**

No

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

NA

**7.2. Name of organization of facility providing data access:****7.2.1. If data hosting service is needed, please indicate:**

no

**7.2.2. URL of data access service, if known:****7.3. Data access methods or services offered:**

Download

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

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

Project shelved in 2003 due to redirection of emphasis. Pandemic in 2019-2022 prompted the downloading of the data loggers and subsequent analysis.

**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):**

Pacific Islands Fisheries Science Center - Honolulu, HI

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

**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*

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

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