

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:**

AFSC/RACE/GAP/Nichol: Archival tag depth and temperature data from Atka mackerel

1.2. Summary description of the data:

Atka mackerel *Pleurogrammus monopterygius* were captured and tagged with depth and temperature recording devices (archival tags) on 23 July 2000 in Seguam Pass, Aleutian Islands, Alaska. Nine of the 117 tagged fish were recovered in Seguam Pass during September 2000, and an additional 5 fish recovered thereafter (14 total). In addition, 413 tags were released in Tanaga Pass in 2002, with 10 recoveries. Fish were tagged externally just below the dorsal fin. Atka mackerel displayed strong diel behavior, with vertical movements away from the bottom occurring almost exclusively during daylight hours and little to no movement at night. Vertical movements occurred when light levels at 150 m were greater than 7.31×10^{-5} $\mu\text{mol photons m}^{-2} \text{ s}^{-1}$, or approximately between 08:00 and 23:00 h Alaska Daylight Time (ADT; GMT – 8) during August. Daytime vertical movements were correlated with light intensity, time of day and current velocity. The occurrence of vertical movements tended to increase with increasing light during the morning and early afternoon, but then decrease with increasing hour of the day after 13:00 h ADT. The magnitude of surface-directed vertical excursions was reduced during spring tide periods, when current velocities are highest. By comparison, the magnitude of slope-directed excursions was greater during spring tide periods and reduced during neap tide periods. Eight fish were at liberty for 42 to 44 d and 1 for 65 d. Two of the tagged males displayed nest guarding behavior for the majority of their time at liberty. Depths for these 2 males (115 to 117 m) were much deeper than previously observed for Atka mackerel spawning grounds. Given that Atka mackerel are more likely to be on the bottom during the night and less likely during the day, the variance of abundance estimates from bottom trawl surveys may be reduced by accounting for these diel differences.

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:

2000, 2002

1.5. Actual or planned geographic coverage of the data:

W: -172.75, E: -171.75, N: 52.25, S: 52

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:**

Metadata Coordinators MC

2.2. Title:

Metadata Contact

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

AFSC.metadata@noaa.gov

2.5. Phone number:**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:

Dan Nichol

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"):

Unknown

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:

Atka mackerel were initially captured during two bottom trawl tows made on 23 July 2000 aboard the chartered F/V Morning Star in Seguam Pass, Alaska. Tow durations were kept short (< 15 min) in order to minimize injury to fish. Fish were held briefly in tanks plumbed with a continuous flow of fresh seawater. A total of 117 fish were tagged with archival tags and released on 23 July 2000; 66 fish from the first tow (Haul 4) at 119 m bottom depth and 51 fish from the second (Haul 7) at 110 m bottom depth. Fish were measured to the nearest cm fork length (FL) and released within 3.1 km of the capture location. Archival tags were externally attached just below the anterior section of the dorsal fin. Fish were secured in a V-shaped cradle and paired 18 gauge hypodermic needles were inserted through the fish. Stainless-steel wire (0.02 gauge, 0.5 mm diameter) was fed through the tag and then through the open end of the hypodermic needles. After removing the hypodermic needles, the stainless-steel wire ends were fed through a pink plastic oval and secured with stainless-steel connector sleeves. This procedure took approximately three minutes per fish. A tag reward program was implemented to retrieve tagged fish. This program was conducted in association with an ongoing spaghetti tag project for Atka mackerel in Seguam Pass (See Susanne McDermott). Publication: Nichol, D.G. and Somerton D.A. Diurnal vertical migration of the Atka Mackerel *Pleurogrammus monopterygius* as shown by archival tags. *Mar. Ecol. Prog Ser.* 239:193-207.

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):**

unknown

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)
- 7.2. Name of organization of facility providing data access

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/28004>

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?

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:

There are no legal restrictions on access to the data. They reside in public domain and can be freely distributed.

7.2. Name of organization of facility providing data access:

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

Yes

7.2.2. URL of data access service, if known:

https://console.cloud.google.com/storage/browser/_details/nmfs_odp_afsc/RACE/GAP/2000-2004%20A

7.3. Data access methods or services offered:

unknown

7.4. Approximate delay between data collection and dissemination:

Unknown

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

No delay

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):**

Alaska Fisheries Science Center - Seattle, WA

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

unknown

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

IT Security and Contingency Plan for the system establishes procedures and applies to the functions, operations, and resources necessary to recover and restore data as hosted in the Western Regional Support Center in Seattle, Washington, following a disruption.

9. Additional Line Office or Staff Office Questions

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