

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:

AMLR Temperature Recording Archival Tags Gentoos 2005-2008 v1.2

1.2. Summary description of the data:

Estimates of daily activity and consequent demand for food during winter are scarce for many polar seabirds, yet essential for assessing constraints on foraging effort, demand for food, and potential competition with local fisheries. We affixed archival temperature tags to gentoo penguins (*Pygoscelis papua*) from two colonies in the South Shetland Islands to measure the frequency, timing, and duration of foraging trips and to estimate minimum food requirements during winter. Foraging trip frequencies ranged from 0.85 to 1.0 trips day⁻¹ and were positively correlated with day length. Early winter foraging trips more closely matched day length than late winter foraging trips. The data suggest that individuals maximize foraging time during the early winter period, likely to recover body mass following the breeding season and molt. The more attenuated response of foraging trip durations to increasing day length in late winter may be related to differences in local resource availability or individual behaviors prior to the upcoming breeding season. Minimum food requirements also exhibited a seasonal cycle with a mid-winter minimum. On average, minimum food requirements were estimated at 0.70 ± 0.12 kg day⁻¹. Extrapolated to the regional population of gentoo penguins, winter food requirements by gentoo penguins were equivalent to roughly 33% of annual krill catches by commercial fisheries in the South Shetland Island region over the past decade. Current expansion of the gentoo population and the krill fishery in the southern Scotia Sea warrants continued monitoring of gentoo penguins during winter.

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:

2005 to 2008

1.5. Actual or planned geographic coverage of the data:

W: -64, E: -43, N: -58, S: -65

FAO Area 48.1, CCAMLR Area 48.1, Antarctic Peninsula, South Shetland Islands, South

Orkney Islands

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: iBKrill

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:

Jefferson Hinke

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

Jefferson.Hinke@noaa.gov

2.5. Phone number:

858-334-2825

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:

Jefferson Hinke

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:

Raw data are collected by researchers at land based stations, entered into data files, reviewed for QA/QC and later on shore-based servers.

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):

Data collected using recognized protocols.

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/37066>

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:

Southwest Fisheries Science Center (SWFSC)

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

7.2.2. URL of data access service, if known:

<https://doi.org/10.7289/V50G3H6Z>

7.3. Data access methods or services offered:

<https://doi.org/10.7289/V50G3H6Z>

7.4. Approximate delay between data collection and dissemination:

Two years

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_CO

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):

Southwest Fisheries Science Center - La Jolla, CA

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

Two years

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

Data are stored on a server at the Southwest Fisheries Science Center which has all appropriate access controls, and archived at the NCEI with assigned DOI (see title section for DOI information).

9. Additional Line Office or Staff Office Questions

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