

*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/ABL: Gulf of Alaska Diel Trawl Survey, 2005-2006

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

Diel epipelagic sampling for juvenile Pacific salmon (*Oncorhynchus* spp.), rockfish (*Sebastes* spp.), sablefish (*Anoplopoma fimbria*), and associated species was conducted in order to identify factors that may affect year-class success of these commercially important species. Sampling occurred in offshore marine habitats of the coastal northeast Pacific Ocean from 10-20 August 2005 and was conducted with a surface trawl fishing the upper 20 m of the water column along transects up to 78 km offshore near 58 N. Three habitats were sampled along each transect over a 24-hr period: the continental shelf (<200 m depth), the continental slope (400-750 m depth), and the abyss (>2,000 m depth). A total of 38,747 fish and squid representing 24 species were sampled in 56 trawl hauls. Of the targeted juvenile fish species, a total of 587 salmon, 11 rockfish, and 70 sablefish were captured. Sampling during day (1500-1900) and night (2200-0200) periods indicated that biomass of fish and squid was 2-4 times higher at night at (each?) all habitat types pooled across transects. No distinct patterns between day or night occurrence were noted for juvenile pink salmon (*O. gorbuscha*), chum salmon (*O. keta*), sockeye salmon (*O. nerka*), or coho salmon (*O. kisutch*), however, juvenile Chinook salmon (*O. tshawytscha*) were encountered only at night. Catches of juvenile rockfish and juvenile sablefish were quite low in this study, and larger sample sizes of these fish are needed to adequately determine their diel distribution. Diel differences were apparent with forage species such as Pacific herring (*Clupea pallasii*), capelin (*Mallotus villosus*), and eulachon (*Thaleichthys pacificus*) that were almost exclusively sampled at night. The offshore distribution patterns of target species were distinctly different, with the most common occurrences of juvenile salmon over continental shelf habitats, juvenile sablefish over continental shelf and slope habitats, and juvenile rockfish over slope and abyss habitats. Pacific herring, capelin, eulachon, and Pacific sardines (*Sardinops sagax*) were found over continental shelf habitats, whereas small squid and myctophids occurred primarily at slope and abyssal habitats. The greatest overall catch biomass was of gelatinous species (jellyfish), which was consistently higher than that of all fish and squid combined, usually by an order of magnitude. Individual fish or squid

species with highest average weight per haul were pomfret (*Brama japonica*), adult coho salmon, Humboldt squid (*Dosidicus gigas*), and blue sharks (*Prionace glauca*). The occurrence of the latter two warm-water species and Pacific sardines were of interest because this study occurred during an anomalously warm year and the capture of Pacific sardines and Humboldt squid represent northern range extensions for these species. Stomach content analysis of potential predator species of the target species showed that only adult coho salmon were predating on juvenile salmon and sablefish, and only pomfret were predating on juvenile rockfish. Further sampling of the target species is needed in these habitats during more normal environmental conditions to validate these observations.

**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 2006

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

W: -137.893, E: -134.986, N: 58.35035, S: 57.44538  
Gulf of Alaska

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*  
maps and data

**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:**

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

**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:**

Joe Orsi

**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"):**

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:

For methodology see: Orsi, J. A., D. M. Clausen, A. C. Wertheimer, D. L. Courtney, and J. E. Pohl. 2006. Diel Epipelagic Distribution of Juvenile Salmon, Rockfish, Sablefish and Ecological Interactions with Associated Species in Offshore Habitats of the Northeast Pacific Ocean (NPAFC Doc. 956) Auke Bay Lab., Alaska Fish. Sci. Cen., Nat. Mar. Fish. Serv., NOAA, 11305 Glacier Highway, Juneau, AK 99801-8626, USA, 26 p.

Process Steps:

- Contact POC for methodology

**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):**

Contact the dataset POC for full QA/QC methodology

## 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)
- 2.1. Point of Contact Name
- 2.4. Point of Contact Email
- 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/17231>

### 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:****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/ABL/Gulf%20of%20Alaska](https://console.cloud.google.com/storage/browser/_details/nmfs_odp_afsc/ABL/Gulf%20of%20Alaska)

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

N/A

**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)*

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):**

Auke Bay Laboratories - Juneau, AK

**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.*