

**Pacific Walrus International Database  
Manual**

**Alaska Biological Science Center  
Biological Resources Division  
US Geological Survey**

**September 1998**

## Introduction

The Pacific Walrus International Database (PWID) is a comprehensive set of Pacific walrus (*Odobenus rosmarus divergens*) biological data collected by several participating organizations in the Bering and Chukchi Seas. Data categories include: land and ice haulout counts, sex/age composition, reproduction, mortality, harvest statistics and morphometry. As of September 1998, there are 33 data sets available for use in Pacific walrus research.

Identical copies of the database are maintained by the Pacific Scientific Research Fisheries Center (TINRO), Magadan, Russia and the Alaska Biological Science Center (ABSC), Anchorage, Alaska, USA. Database managers at each facility will provide unlimited access to properly authorized users (see 'Using the Database', below). Please direct inquiries to your local database manager:

	<b>Russia</b>	<b>United States</b>
<b>Manager:</b>	Yuri Buktiyarov	Michael Rehberg
<b>Agency:</b>	TINRO - Magadan Branch	USGS – Alaska Biological Science Center
<b>Address:</b>	Magadan 41322 Russia	1011 East Tudor Road Anchorage, AK 99503 USA
<b>Telephone:</b>	(095) 413-264-21	(907) 786-3686
<b>Fax:</b>	(095) 413-264-13	(907) 786-3636
<b>Email:</b>	tinro@online.magadan.su (Place "Yuri Buktiyarov" in subject line.)	michael_rehberg@usgs.gov

PWID participants include: Alaska Biological Science Center, Biological Resources Division, US Geological Survey; Marine Mammals Management, US Fish and Wildlife Service; Alaska Department of Fish and Game; University of Alaska – Fairbanks; Togiak National Wildlife Refuge, US Fish and Wildlife Service; Pacific Institute of Fisheries and Oceanography, Russia; Wrangel Island State Nature Reserve, Russia; and the Institute of Ecology and Evolution, Russian Academy of Sciences. Development of this database was funded by the Minerals Management Service, US Department of Interior.

## Database Structure and Content

PWID consists of data sets and standard metadata files which describe them. Each individual data set covers a particular theme, such as "Wrangel Island Haulout Counts" and "1984 Alpha Helix Cruise". All files are organized in a directory structure on personal computer running Microsoft Windows.

### **Metadata**

Metadata tables are detailed descriptions of the quality, content and ownership of each data set contained in PWID. Metadata files are also available for some data sets which are held privately by data owners; this is intended to facilitate communication between researchers. There are 3 types of metadata, Local Database Level, Table Level and Field Level, described in Appendices 1-3.

## Data Sets

Data sets consist of one or more database tables associated by a common theme. The data are stored in *Paradox Version 5* database tables. Other modern database and spreadsheet software will import these tables successfully, but relations and customized interfaces may be lost. Review the associated metadata carefully to determine required lookup tables, find keys for codes used in the database, and learn other important information.

## Using the Database

### Review the Metadata

Request a copy of the Local Database Level Metadata file from your local database manager. It is available as an interactive *Paradox Version 5* database, *Adobe Acrobat* document or *Word Perfect* document. The metadata describe all pertinent details (Appendix 1) of every data set available. Please direct questions about the nature of a data set directly to the data owner listed.

### Request Permission from Data Owner

Potential database users must request, in writing, permission from the original data owner to access any data set. Specify in the request: which data are being requested, the purpose of the request, intended uses of the data, and intentions regarding any form of publication resulting from data access. Authorship and/or acknowledgment issues should be addressed in the request document.

Data owners, if in agreement, will grant written permission which may include conditions they feel are appropriate for granting access. Conditions might include limited scope of access, limited time frame for access, limitations on subsequent publication and authorship restrictions.

### Contact Local Database Manager

The US or Russian database manager must receive written copies of the request and permission documents before data are released to a potential user. The database manager will release data sets subject to the conditions imposed by the data owner. Potential users should contact the local database manager to arrange file transfer.

### Using the Data Sets

Data tables, Table-Level (Appendix 2) and Field-Level (Appendix 3) metadata tables are provided with each data set. PWID data sets are provided to users as *Paradox Version 5* database tables. If you require an alternative file format, please contact your local database administrator for options.

Some data sets are provided with customized graphical *user interface forms*, which simplify access to the database. These interfaces have an “.fsl” file extension. Click on the

icon to use the form. Some data sets also include custom *report forms*, which format the database for output to a printer. These reports have an “.rsl” extension. Click on the icon to run the report.

### **Errors and Omissions**

Please report any errors or omissions to the original data owner.

### **Violations**

Violations of the mutual access agreements between a potential user and data owner will result in exclusion of the user from any future access to PWID. If an unauthorized publication is involved in the violation, the PWID manager(s) and original data owner will notify publishers of the disputed data that a violation of professional ethics has occurred.

### **Submitting Data to the Database**

Please contact your local database manager for guidance in data submission. For each data set, submit Local, Table and Field – level metadata entries as text files following the format in Appendices 1-3. Please submit data tables in one of the following formats: *Corel Paradox*, *Microsoft Excel*, *Borland Quattro Pro* or *Lotus 1-2-3*. Other file formats may also be accommodated; contact the database manager for details.

### **Questions and Comments**

Please submit inquiries and suggestions regarding the structure, usage and administration of PWID to your local database manager. Direct questions about the content of individual data sets directly to the data set owner.

## Appendices

### Appendix 1. Local database level metadata format.

Local Database Level Metadata describe the general content of an entire data set.

**a. Data Category:**

- ASIC** aerial counts of walrus in sea and on ice
- SSIC** shipboard counts of walrus on sea and ice
- BC** aerial and ground counts of walrus on beach
- SAC** sex and age composition
- R** reproduction
- M** mortality
- H** harvest
- MT** morphometry

Multiple data categories may be used to describe a single data set. List the most appropriate category first in a comma-separated list.

- b. Location:** General region from which data were collected. Narrative description (eg- Western Bering Sea) or geographic bounding coordinates are acceptable.
- c. Dates:** Inclusive dates during which data were collected.
- d. Owner:** Agency responsible for data maintenance and granting access permission. Minimum content is a full surface mail address and telephone number. Please include telephone, facsimile , and electronic mail contact information if applicable.
- e. Principal Investigators:** Individuals leading data collection.
- f. Data contained in database:**  
**Y** = yes. Data are available from the PWID manager.  
**N** = no. Data are held privately by the data owner.
- g. Status:** Current stage of completeness of the data set.

**1 = Work in progress.** Data are being actively collected or revised. Generally, these data are not considered for release until work is complete.

**2 = Data set completed.** Data collection is complete and some initial processing and error correction have been conducted. These data may be considered for release to appropriate users. However, specific proposals must be carefully reviewed by data owners.

**3 = Data archived.** Data collection has ceased and data have been thoroughly verified and evaluated. In most cases, the work for which the data were collected has been completed. These data are usually provided to potential users when release is authorized by the data owner.

**h. Permission:** The current level of access permitted by the data owner. All potential users must secure permission from the data owner to access a data set, regardless of the permission status indicated here.

**U = Unrestricted access to all fields.** All fields in the data set are available upon request.

**R = Restricted access to all fields.** No fields in the data set are available for access.

**P = Restricted access to some fields.** Some fields in the data set are available upon request.

**i. Additional comments:** May include references to published literature which may be useful to gain a better understanding of how the data were collected and potential limitations.

**Appendix 2. Table level metadata format.**

Table-Level Metadata describe the content of each individual database table comprising the data set. The data set may consist of one or more database tables (files). Additional files, such as lookup tables, user interface scripts and text, may also be included. The database manager will determine items c. and d. below.

- a. **Name.** Name of file(s) that comprise this data set.
- b. **Description.** Narrative description of the file(s).
- c. **Datetime:** Date and time of last revision to file.
- d. **Filesize:** File size in kilobytes.

### Appendix 3. Field level metadata format.

Field-Level Metadata describe the contents and usage of each individual field (or column) in a database table. The database manager will determine items d., e. and f., below.

- a. **Name:** Field name.
- b. **Description:** Complete description of the field contents. Include units (eg - millimeters, individuals) and the value which represents NODATA, if applicable. (NODATA is a defined value which prevents an empty observation from being falsely interpreted as “zero”.)
- c. **LUT:** Name of lookup table which explains data codes used in field, if applicable.
- d. **Type:** Data type: numeric, character, date or binary object.
- e. **Width:** Field width, in characters.
- f. **% Full:** Percentage of records in table which have a non-empty data item in this field.