

Crabeater Seal morphometrics from ARSV Laurence M. Gould cruises LMG0106 and LMG0205 in the Southern Ocean from 2001-2002 (SOGLOBEC project; Crabeater Seal Foraging project)

Website: <https://www.bco-dmo.org/dataset/2380>

Data Type: Cruise Results

Version: 1

Version Date: 2005-03-31

Project

» [U.S. GLOBEC Southern Ocean](#) (SOGLOBEC)

» [Foraging Ecology of Crabeater Seals \(Lobodon Carcinophagus\)](#) (Crabeater Seal Foraging)

Programs

» [U.S. GLOBal ocean ECosystems dynamics](#) (U.S. GLOBEC)

» [U.S. GLOBal ocean ECosystems dynamics](#) (U.S. GLOBEC)

Contributors	Affiliation	Role
Burns, Jennifer	University of Alaska, Anchorage (UAA)	Co-Principal Investigator
Costa, Daniel P.	University of California-Santa Cruz (UCSC)	Co-Principal Investigator
Allison, Dicky	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager

Abstract

Crabeater Seal morphometrics from ARSV Laurence M. Gould cruises LMG0106 and LMG0205 in the Southern Ocean from 2001-2002 (SOGLOBEC project; Crabeater Seal Foraging project)

Table of Contents

- [Coverage](#)
 - [Dataset Description](#)
 - [Data Files](#)
 - [Parameters](#)
 - [Deployments](#)
 - [Project Information](#)
 - [Program Information](#)
 - [Funding](#)
-

Coverage

Temporal Extent: 2001-07-29 - 2002-09-09

Dataset Description

Seal Studies, Southern Ocean GLOBEC, Seal Morphometrics Data

* Blubber depths determined by ultrasound

For additional details on sampling and analytical methods see:

Burns, Jennifer M., Daniel P. Costa, Michael A. Fedak, Mark A. Hindell, Corey J.A. Bradshaw, Nicholas C. Gales, Birgitte McDonald, Stephan J. Trumble, Daniel E. Crocker, 2004. Winter habitat use and foraging behavior of crabeater seals along the Western Antarctic Peninsula. Deep-Sea Research II vol 51, pp 2279-2303.

Links to companion seal files:

[General Seal Background Information](#)

[Seal Physiology - bloodwork](#)

Contact Information:

Jennifer Burns, Ph.D.
Department of Biological Sciences
University of Alaska
Anchorage, AK 99508
907-786-1527
afjmb4@uaa.alaska.edu

Daniel P. Costa Ph.D.
Long Marine Laboratory
University of California
100 Shaffer Rd
Santa Cruz, CA 95060
Office: 831 459-2786
FAX: 831 459-3383
costa@biology.ucsc.edu

last updated April 25, 2006

[[table of contents](#) | [back to top](#)]

Data Files

File
seals_morphs.csv (Comma Separated Values (.csv), 6.41 KB) MD5:7924c5f23fa6edaf4223022ffaec6883 Primary data file for dataset ID 2380

[[table of contents](#) | [back to top](#)]

Parameters

Parameter	Description	Units
year	year cruise occurs	
tagid	SealTagID = Flipper Tag	
sealname	name as text	
month_local	month of year (1-12), local time	
day_local	day of month (1-31), local time	
species	common name of organism, text	
event	Event or operation number. Unique ID.	
ageclass	Age class as estimated in field, (text i.e. adult)	
sex	Sex of organism (as text i.e. male)	
ud_pelvis	Dorsal blubber depth* at the pelvis	cm
ud_mid	Dorsal blubber depth* at a point midway between the hips and the sternum	cm
ud_stern	Dorsal blubber depth* at the sternum	cm
ud_ax	Dorsal blubber depth* at the axilla (armpit)	cm
ud_neck	Dorsal blubber depth* at the neck	cm
ul_pelvis	Lateral blubber depth* at the pelvis	cm

ul_mid	Lateral blubber depth* at a point midway between the hips and the sternum	cm
ul_stern	Lateral blubber depth* at the sternum	cm
ul_ax	Lateral blubber depth* at the axilla (armpit)	cm
ul_neck	Lateral blubber depth* at the neck	cm
uv_pelvis	Ventral blubber depth* at the pelvis	cm
uv_mid	Ventral blubber depth* at a point midway between the hips and the sternum	cm
uv_stern	Ventral blubber depth* at the sternum	cm
uv_ax	Ventral blubber depth* at the axilla	cm
uv_neck	Ventral blubber depth* at the neck	cm
len_to_ank	Length from tip of tail to ankle, along dorsal surface	cm
len_to_pel	Length from tip of tail to pelvis, along dorsal surface	cm
len_to_mid	Length from tip of tail to point midway between the hips and the sternum, along dorsal surface	cm
len_to_stern	Length from tip of tail to sternum, along dorsal surface	cm
len_to_ax	Length from tip of tail to axilla (armpit), along dorsal surface	cm
len_to_neck	Length from tip of tail to neck, along dorsal surface	cm
len_to_ears	Length from tip of tail to ears, along dorsal surface	cm
len_curve	curved length: measured from tip of nose to tip of tail, measured following the curve of the animal's spine along the dorsal surface	cm
len_std	standard length: straight-line length from tip of nose to tip of tail, measured above the dorsal surface (animal lying on its belly),	cm
girth_ank	Girth at the ankle	cm
girth_pel	Girth at the pelvis	cm
girth_mid	Girth at a point midway between the hips and the sternum	cm
girth_stern	Girth at the sternum	cm
girth_ax	Girth at the axilla	cm
girth_neck	Girth at the neck	cm
girth_ears	Girth at the ears	cm
mass	Mass of seal	kg

[[table of contents](#) | [back to top](#)]

Deployments

LMG0106

Website	https://www.bco-dmo.org/deployment/57639
Platform	ARSV Laurence M. Gould
Report	http://www.ccpo.odu.edu/Research/globec/cruises01/lmg0106_menu.html
Start Date	2001-07-21
End Date	2001-09-01

LMG0205

Website	https://www.bco-dmo.org/deployment/57644
Platform	ARSV Laurence M. Gould
Report	http://www.ccpo.odu.edu/Research/globec/main_cruises02/lmg0205/report_lmg0205.pdf
Start Date	2002-07-29
End Date	2002-09-18

[[table of contents](#) | [back to top](#)]

Project Information

U.S. GLOBEC Southern Ocean (SOGLOBEC)

Website: http://www.ccpo.odu.edu/Research/globec_menu.html

Coverage: Southern Ocean

The fundamental objectives of United States Global Ocean Ecosystems Dynamics (U.S. GLOBEC) Program are dependent upon the cooperation of scientists from several disciplines. Physicists, biologists, and chemists must make use of data collected during U.S. GLOBEC field programs to further our understanding of the interplay of physics, biology, and chemistry. Our objectives require quantitative analysis of interdisciplinary data sets and, therefore, data must be exchanged between researchers. To extract the full scientific value, data must be made available to the scientific community on a timely basis.

Foraging Ecology of Crabeater Seals (*Lobodon Carcinophagus*) (Crabeater Seal Foraging)

Coverage: Southern Ocean

The U.S. Global Ocean Ecosystems Dynamics (U.S. GLOBEC) program has the goal of understanding and ultimately predicting how populations of marine animal species respond to natural and anthropogenic changes in climate. Research in the Southern Ocean (SO) indicates strong coupling between climatic processes and ecosystem dynamics via the annual formation and destruction of sea ice. The Southern Ocean GLOBEC Program (SO GLOBEC) will investigate the dynamic relationship between physical processes and ecosystem responses through identification of critical parameters that affect the distribution, abundance and population dynamics of target species. The overall goals of the SO GLOBEC program are to elucidate shelf circulation processes and their effect on sea ice formation and krill distribution, and to examine the factors which govern krill survivorship and availability to higher trophic levels, including penguins, seals and whales. The focus of the U.S. contribution to the international SO GLOBEC program will be on winter processes. This component will focus on the distribution and foraging behavior of adult female crabeater seals, using a combination of satellite-linked tracking, specialized diver recorders, and stable isotopic tracers. This research will be coordinated with components focused on prey (krill) distribution and the physical environment. The results will be analyzed using an optimality model. The result of the integrated SO GLOBEC program will be to improve the predictability of living marine resources, especially with respect to local and global climatic shifts.

[[table of contents](#) | [back to top](#)]

Program Information

U.S. GLOBAL ocean ECosystems dynamics (U.S. GLOBEC)

Website: <http://www.usglobec.org/>

Coverage: Global

U.S. GLOBEC (GLOBal ocean ECosystems dynamics) is a research program organized by oceanographers and fisheries scientists to address the question of how global climate change may affect the abundance and production of animals in the sea.

The U.S. GLOBEC Program currently had major research efforts underway in the Georges Bank / Northwest Atlantic Region, and the Northeast Pacific (with components in the California Current and in the Coastal Gulf of Alaska). U.S. GLOBEC was a major contributor to International GLOBEC efforts in the Southern Ocean and Western Antarctic Peninsula (WAP).

U.S. GLOBAL ocean ECosystems dynamics (U.S. GLOBEC)

Website: <http://www.usglobec.org/>

Coverage: Global

U.S. GLOBEC (GLOBal ocean ECosystems dynamics) is a research program organized by oceanographers and fisheries scientists to address the question of how global climate change may affect the abundance and production of animals in the sea.

The U.S. GLOBEC Program currently had major research efforts underway in the Georges Bank / Northwest Atlantic Region, and the Northeast Pacific (with components in the California Current and in the Coastal Gulf of Alaska). U.S. GLOBEC was a major contributor to International GLOBEC efforts in the Southern Ocean and Western Antarctic Peninsula (WAP).

[[table of contents](#) | [back to top](#)]

Funding

Funding Source	Award
NSF Antarctic Sciences (NSF ANT)	ANT-0003956
NSF Antarctic Sciences (NSF ANT)	ANT-9981683

[[table of contents](#) | [back to top](#)]