Cetacean observations from the Northern California Current in the Northeast Pacific on R/V New Horizon cruises NH0005 and NH0007 in 2000 (NEP project)

Website: https://www.bco-dmo.org/dataset/2339
Data Type: Cruise Results
Version: 1
Version Date: 2007-03-30

Project
» U.S. GLOBEC Northeast Pacific (NEP)

Program
» U.S. GLOBal ocean ECosystems dynamics (U.S. GLOBEC)

Contributors	Affiliation	Role
Ainley, David G.	H.T. Harvey & Associates	Principal Investigator
Tynan, Cynthia	Northwest Fisheries Science Center - Seattle (NOAA NWFSC)	Co-Principal Investigator
Allison, Dicky	Woods Hole Oceanographic Institution (WHOI BCO-DMO)	BCO-DMO Data Manager

Abstract
Cetacean observations from the Northern California Current in the Northeast Pacific on R/V New Horizon cruises NH0005 and NH0007 in 2000

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Coverage

Spatial Extent: **N**:44.68547 **E**:-122.96828 **S**:37.91703 **W**:-126.04221
Temporal Extent: 2000-05-31 - 2000-08-11

Dataset Description

GLOBEC NEP Northern California Current Cetacean Survey Data
R/V New Horizon cruises NH0005 and 0007

Line-transect surveys of cetaceans were conducted during two cruises of the GLOBEC Northeast Pacific Northern California Current (NCC) program in 2000: May 29 -June 13 and July 27 - August 12. Surveys were conducted across the shelf and slope off Oregon and northern California (41.9° - 44.65° N) from the coast to ~125.5°W.

For additional information please see the following publication:
Cynthia T. Tynan, David G. Ainley, John A. Barth, Timothy J. Cowles, Stephen D. Pierce and Larry B. Spear, 2005. Cetacean distributions relative to ocean processes in the northern California Current System Deep Sea Research Part II: Topical Studies in Oceanography, Volume 52, Issues 1-2, January 2005, Pages 145-167

Any questions, contact PIs:
Cynthia T. Tynan
David G. Ainley (H.T. Harvey & Associates)

updated 09/14/05, gfh

Methods & Sampling

Surveys were conducted in passing mode while the R/V New Horizon was in transit between stations for hydrographic and zooplankton sampling. Observations were conducted from the flying bridge during daylight (~0600 to 2030) whenever sufficient visibility (i.e., > 2 nm) and weather (i.e., < Beaufort 6) allowed. Two observers simultaneously surveyed to the horizon with 25 x 150 binoculars, equipped with compass and reticle. Each observer surveyed a 100° arc from 10° off the bow (opposite side) to 90° on their side of the ship. A third observer focused on the track-line by eye, aided with 7 x 50 hand-held binoculars. Sightings were entered immediately on a laptop computer connected to the ship's GPS system. Positions of all sightings were corrected to reflect the actual location of the cetaceans, rather than the ship's position. The height from the surface of the water to the eyes of observers on the 25 x 150 binoculars was 10.87 m.

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Data Files

File
cetaceans.csv (Comma Separated Values (.csv), 50.73 KB) MD5:66462f19493ce05a3e2ea0ecfb9aff23 Primary data file for dataset ID 2339

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Parameters

Parameter	Description	Units
cruiseid	Cruise identifier, e.g. NH0005, for R/V New Horizon, cruise 0005.	dimensionless
month	Months in which the survey was conducted.	dimensionless
year	Year in which the survey was conducted.	dimensionless
species_code	A two-digit identifier for a given cetacean species.	dimensionless
species	The scientific name for a given cetacean species.	dimensionless
common_name	The common name for a given cetacean species.	dimensionless
number	The best estimate of the number of animals in the sighting.	dimensionless
month_local	Month of the sighting (0 to 12), local time.	dimensionless
day_local	Day of month (0 to 31), local time.	dimensionless
time_local	Time of the sighting, local Pacific Standard Time.	hours & decimal minutes
lat	Latitude for the cetacean position, not ship, negative = South	decimal degrees
lon	Longitude for the cetacean position, not ship, negative = West	decimal degrees
effort_type	Type of effort: 1 for sighting from 25 x 150 binoculars 2 for sighting with 7 x 50 binoculars, or by eye.	dimensionless

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Instruments

Dataset-specific Instrument Name	Handheld Binoculars
Generic Instrument Name	Binoculars Handheld
Dataset-specific Description	Handheld binoculars, general used for bird observations
Generic Instrument Description	Handheld binoculars, generally used for bird or mammal observations.

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Deployments

NH0005

Website	https://www.bco-dmo.org/deployment/57557
Platform	R/V New Horizon
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/nh0005/nh0005cr.pdf
Start Date	2000-05-28
End Date	2000-06-13
Description	**Methods & Sampling** Line-transect surveys of cetaceans were conducted during two cruises of the GLOBEC Northeast Pacific Northern California Current (NCC) program in 2000: May 29 -June 13 and July 27 - August 12. Surveys were conducted across the shelf and slope off Oregon and northern California (41.9º - 44.65º N) from the coast to ~125.5ºW. Surveys were conducted in passing mode while the R/V New Horizon was in transit between stations for hydrographic and zooplankton sampling. Observations were conducted from the flying bridge during daylight (~0600 to 2030) whenever sufficient visibility (i.e., > 2 nm) and weather (i.e.,

NH0007

Website	https://www.bco-dmo.org/deployment/57558
Platform	R/V New Horizon
Report	http://globec.whoi.edu/nep/reports/ccs_cruises/nh0007/nh0007cr.pdf
Start Date	2000-07-27
End Date	2000-08-12
Description	**Methods & Sampling** Line-transect surveys of cetaceans were conducted during two cruises of the GLOBEC Northeast Pacific Northern California Current (NCC) program in 2000: May 29 -June 13 and July 27 - August 12. Surveys were conducted across the shelf and slope off Oregon and northern California (41.9º - 44.65º N) from the coast to ~125.5ºW. Surveys were conducted in passing mode while the R/V New Horizon was in transit between stations for hydrographic and zooplankton sampling. Observations were conducted from the flying bridge during daylight (~0600 to 2030) whenever sufficient visibility (i.e., > 2 nm) and weather (i.e.,

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Project Information

U.S. GLOBEC Northeast Pacific (NEP)

Website: http://nepglobec.bco-dmo.org

Coverage: Northeast Pacific Ocean, Gulf of Alaska

Program in a Nutshell

Goal: To understand the effects of climate variability and climate change on the distribution, abundance and production of marine animals (including commercially important living marine resources) in the eastern North Pacific. To embody this understanding in diagnostic and prognostic ecosystem models, capable of capturing the ecosystem response to major climatic fluctuations.

Approach: To study the effects of past and present climate variability on the population ecology and population dynamics of marine biota and living marine resources, and to use this information as a proxy for how the ecosystems of the eastern North Pacific may respond to future global climate change. The strong temporal variability in the physical and biological signals of the NEP will be used to examine the biophysical mechanisms through which zooplankton and salmon populations respond to physical forcing and biological interactions in the coastal regions of the two gyres. Annual and interannual variability will be studied directly through **long-term observations** and detailed **process studies**; variability at longer time scales will be examined through **retrospective analysis** of directly measured and proxy data. Coupled **biophysical models** of the ecosystems of these regions will be developed and tested using the process studies and data collected from the long-term observation programs, then further tested and improved by hindcasting selected retrospective data series.

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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).

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Funding

Funding Source	Award
NSF Division of Ocean Sciences (NSF OCE)	OCE-0534609
National Oceanic and Atmospheric Administration (NOAA)	unknown NEP NOAA

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