

AFSC/ABL: Gulf of Alaska and Bering Sea Capelin Microsatellite data, 2005 & 2007

Theme keywords: Biota, 002

Abstract: Capelin are important forage fish in Alaska for marine mammals, birds, and predatory fish. Capelin prefer cold water and are very sensitive to changing environmental conditions. Population studies in the Arctic suggest that capelin migrate with temperature changes. During warm historical periods, capelin migrated through the Arctic Ocean to move between Pacific and Atlantic Oceans. Strong preference for specific temperature regimes may cause some populations to become trapped in local refugia such as glacier fiords, if sea temperatures fluctuate. Preliminary data in our laboratory suggests that the Bering Sea and Gulf of Alaska capelin populations are genetically isolated. Based on their histories, we predict that capelin populations have strongly diverged in local refugia. Understanding the genetic structure of Alaska capelin populations will allow us to estimate whether these populations are isolated and how they might respond to warming environmental conditions. Results will provide crucial information to Gulf of Alaska and Bering Sea ecosystem models.

FGDC, ESRI, and Biological Profile Metadata:

- [Identification Information](#)
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- [Distribution Information](#)
- [Metadata Reference Information](#)

Metadata elements shown with **blue** text are defined in the Federal Geographic Data Committee's (FGDC) [Content Standard for Digital Geospatial Metadata \(CSDGM\)](#). Elements shown with **green** text are defined in the [ESRI Profile of the CSDGM](#). Elements shown with **brown** text are defined in the [NBII Biological Profile of the CSDGM](#). Elements shown with a green asterisk (*) will be automatically updated by ArcCatalog. ArcCatalog adds hints indicating which FGDC elements are mandatory; these are shown with gray text.

Identification Information:

Citation:

Citation information:

Originators: Sharon Wildes, AFSC

Title:

AFSC/ABL: Gulf of Alaska and Bering Sea Capelin Microsatellite data, 2005 & 2007

Publication date: Unpublished material
Geospatial data presentation form: maps and data

Description:

Abstract:

Capelin are important forage fish in Alaska for marine mammals, birds, and predatory fish. Capelin prefer cold water and are very sensitive to changing environmental conditions. Population studies in the Arctic suggest that capelin migrate with temperature changes. During warm historical periods, capelin migrated through the Arctic Ocean to move between Pacific and Atlantic Oceans. Strong preference for specific temperature regimes may cause some populations to become trapped in local refugia such as glacier fiords, if sea temperatures fluctuate. Preliminary data in our laboratory suggests that the Bering Sea and Gulf of Alaska capelin populations are genetically isolated. Based on their histories, we predict that capelin populations have strongly diverged in local refugia. Understanding the genetic structure of Alaska capelin populations will allow us to estimate whether these populations are isolated and how they might respond to warming environmental conditions. Results will provide crucial information to Gulf of Alaska and Bering Sea ecosystem models.

Purpose:

This dataset contains the capelin microsatellite data described in the abstract.

Time period of content:

Time period information:

Multiple dates/times:

Single date/time:

Calendar date: 2005

Single date/time:

Calendar date: 2007

Currentness reference:

ground condition

Status:

Progress: In work

Maintenance and update frequency: Unknown

Spatial domain:

Description of geographic extent:

Gulf of Alaska; Bering Sea; Alaska

Bounding coordinates:

West bounding coordinate: -179.73

East bounding coordinate: -137.196167

North bounding coordinate: 68.05217

South bounding coordinate: 54.29

Keywords:

Theme:

Theme keywords: Biota, 002

Theme keyword thesaurus: ISO 19115 Topic Categories

Place:

Place keywords: Alaska

Place keyword thesaurus: Geographic Names Information System

Taxonomy:

Keywords/taxon:

Taxonomic keywords: collection, multiple species, vertebrates

Taxonomic keyword thesaurus:None

Taxonomic classification:

Taxon rank name: Empire

Taxon rank value: Biovitae

Applicable common names: Carbon-based lifeforms

Taxonomic classification:

Taxon rank name: Kingdom

Taxon rank value: Animalia

Taxonomic classification:

Taxon rank name: Phylum

Taxon rank value: Chordata

Taxonomic classification:

Taxon rank name: Subphylum

Taxon rank value: Vertebrata

Taxonomic classification:

Taxon rank name: Superclass

Taxon rank value: Osteichthyes

Taxonomic classification:

Taxon rank name: Class

Taxon rank value: Actinopterygii

Taxonomic classification:

Taxon rank name: Subclass
Taxon rank value: Neopterygii

Taxonomic classification:

Taxon rank name: Infraclass
Taxon rank value: Teleostei

Taxonomic classification:

Taxon rank name: Superorder
Taxon rank value: Protacanthopterygii

Taxonomic classification:

Taxon rank name: Order
Taxon rank value: Osmeriformes

Taxonomic classification:

Taxon rank name: Suborder
Taxon rank value: Osmeroidei

Taxonomic classification:

Taxon rank name: Superfamily
Taxon rank value: Osmeroidea

Taxonomic classification:

Taxon rank name: Family
Taxon rank value: Osmeridae

Taxonomic classification:

Taxon rank name: Genus
Taxon rank value: Mallotus

Taxonomic classification:

Taxon rank name: Species
Taxon rank value: villosus
Applicable common names:
Capelin

Access constraints: The Data set is still being analyzed and will not be available for distribution until it has been finalized and

all QA/QC practices have been performed. Contact the Data Point of Contact for estimated time of release.

Use constraints:

User must read and fully comprehend the metadata prior to use. Data should not be used beyond the limits of the source scale. Acknowledgement of NOAA, as the source from which these data were obtained, in any publications and/or other representations of these data is suggested.

Point of contact:

Contact information:

Contact person primary:

Contact person: Sharon Wildes

Contact organization: National Oceanic and Atmospheric Administration (NOAA) Alaska Fisheries Science Center (AFSC) Auke Bay Laboratories (ABL)

Contact address:

Address type: mailing and physical

Address:

17109 Point Lena Loop Road

City: Juneau

State or province: AK

Postal code: 99801

Country: USA

Contact voice telephone: 907-789-6000

Contact facsimile telephone: 907-789-6094

Contact electronic mail address: sharon.wildes@noaa.gov

Contact instructions:

The e-mail address directs you to the person most knowledgeable about this data. If an alternative contact person becomes necessary, use the voice phone number for referral.

Native data set environment:

Microsoft Excel Spreadsheet

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Data Quality Information:

Logical consistency report:

No logical consistency test were run.

Completeness report:

None

Lineage:

Process step:

Process description:

No process steps have been described for this data set

Process date: Unknown

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Distribution Information:

Distributor:

Contact information:

Contact person primary:

Contact person: Sharon Wildes

Contact organization: National Oceanic and Atmospheric Administration (NOAA) Alaska Fisheries Science Center (AFSC) Auke Bay Laboratories (ABL)

Contact address:

Address type: mailing and physical

Address:

17109 Point Lena Loop Road

City: Juneau

State or province: AK

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Contact electronic mail address: sharon.wildes@noaa.gov

Contact instructions:

The e-mail address directs you to the person most knowledgeable about this data. If an alternative contact

person becomes necessary, use the voice phone number for referral.

Resource description: Offline data

Distribution liability:

The user is responsible for the results of any application of this data for other than its intended purpose.

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Metadata Reference Information:

Metadata date: 20081203

Metadata review date: 20100129

Metadata contact:

Contact information:

Contact person primary:

Contact person: Emily Fergusson

Contact organization: National Oceanic and Atmospheric Administration (NOAA) Alaska Fisheries Science Center (AFSC) Auke Bay Laboratories (ABL)

Contact position: Metadata coordinator

Contact address:

Address type: mailing and physical

Address:

17109 Point Lena Loop Road

City: Juneau

State or province: AK

Postal code: 99801

Country: USA

Contact voice telephone: Use e-mail to contact the metadata coordinator.

Contact facsimile telephone: 907-789-6094

Contact electronic mail address: AFSC.metadata@noaa.gov

Metadata standard name: FGDC Biological Data Profile of the Content Standard for Digital Geospatial Metadata

Metadata standard version: FGDC-STD-001.1-1999

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