AFSC/ABL: Genetic analysis of juvenile chum salmon from the Chukchi Sea and Bering Strait

Theme keywords: Biota, 002, genetic stock identification

Abstract: The Arctic region has experienced warming in recent years, resulting in decreased summer sea ice cover and increased sea surface temperatures. In 2007, the U.S. BASIS survey extended surface trawling into the Chukchi Sea; juvenile chum salmon were collected at most stations. Genetic methods were applied to identify the origin of the juvenile chum salmon collected in the Chukchi Sea and Bering Strait. Most of the juvenile chum salmon caught in the Bering Strait were from northern Russian populations and the majority collected in the Chukchi Sea were from northwestern Alaska populations.

FGDC, ESRI, and Biological Profile Metadata:

- Identification Information
- Data Quality Information
- Distribution Information
- Metadata Reference Information

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

Identification Information:

Citation:

Citation information:

Originators: Kondzela, Chris, AFSC

Title:

AFSC/ABL: Genetic analysis of juvenile chum salmon from the Chukchi Sea and Bering Strait

Publication date: Unpublished material

Geospatial data presentation form: maps and data

Description:

Abstract:

The Arctic region has experienced warming in recent years, resulting in decreased summer sea ice cover and increased sea surface temperatures. In 2007, the U.S. BASIS survey extended surface trawling into the Chukchi Sea; juvenile chum salmon were collected at most stations. Genetic methods were applied to identify the origin of the juvenile chum salmon collected in the Chukchi Sea and Bering Strait. Most of the juvenile chum salmon caught in the Bering Strait were from northern Russian populations and the majority collected in the Chukchi Sea were from northwestern Alaska populations.

Purpose:

This data set contains the unpublished SNP and microsatellite data used to identify chum salmon stocks captured in the Chukchi Sea and Bering Strait in 2007.

Time period of content:

Time period information: 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:

Alaska, Chukchi Sea, Bering Sea

Bounding coordinates:

West bounding coordinate: -168.5 East bounding coordinate: -166.0 North bounding coordinate: 69.5 South bounding coordinate: 65.5

Keywords:

Theme:

Theme keywords: Biota, 002

Theme keyword thesaurus: ISO 19115 Topic Categories

Theme:

Theme keywords: genetic stock identification

Theme keyword thesaurus: None

Place:

Place keywords: Alaska, Bering Sea, Chukchi Sea

Place keyword thesaurus: Geographic Names Information System

Taxonomy:

Keywords/taxon:

Taxonomic keywords: collection, single 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: Salmoniformes

Taxonomic classification:

Taxon rank name: Family
Taxon rank value: Salmonidae

Taxonomic classification:

Taxon rank name: Subfamily Taxon rank value: Salmoninae

Taxonomic classification:

Taxon rank name: Genus

Taxon rank value: Oncorhynchus

Taxonomic classification:

Taxon rank name: Species
Taxon rank value: keta

Applicable common names: chum

salmon

Access constraints: There are no legal restrictions on access to the data. They reside in public domain and can be freely distributed.

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: Chris Kondzela

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: chris.kondzela@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

Back to Top

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

Back to Top

Distribution Information:

Distributor:

Contact information:

Contact person primary:

Contact person: Chris Kondzela

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: chris.kondzela@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.

Distribution liability:

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

Back to Top

Metadata Reference Information:

Metadata date: 20081208

Metadata review date: 20100122

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 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

Back to Top