AFSC/ABL: Juvenile chum salmon allozyme stock identification, Bering Sea 2002

Theme keywords: Biota, 002, genetic analyses, stock-specific migration, chum salmon, Oncorhynchus keta

Abstract: Genetic stock identification techniques were used to identify the origin and provide stock-specific migration and distribution patterns of juvenile chum (Oncorhynchus keta) salmon caught during annual fall surveys (2002) along the eastern Bering Sea (Fig. 1). Preliminary results indicate that: 1) Yukon River Fall chum salmon are widely distributed from offshore of the Yukon River, eastward to 62°N, 172°W, and as far south as Nunivak Island (60°N), suggesting a southwesterly migration pathway along the Bering Sea shelf; 2) juvenile chum salmon from the Kuskokwim River are narrowly distributed south of Nunivak Island from the mouth of the Kuskokwim River, south to 58°N, and as far west as 168°W, suggesting a westerly migration pathway along the Bering Sea shelf; and 3) northern Russia juvenile chum salmon stocks (mainly stocks from rivers draining into the Gulf of Anadyr) are distributed as far east as 62°N, 171°W (Fig. 2). These results are unique in that they represent the first attempt to identify early marine distribution and migration of juvenile chum salmon stocks on the eastern Bering Sea shelf.

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</u> <u>(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</u> <u>Profile of the CSDGM</u>. 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: Chris Kondzela, AFSC

Title:

AFSC/ABL: Juvenile chum salmon allozyme stock identification, Bering Sea 2002

Publication date: 2003 Geospatial data presentation form: maps and data

Other citation details:

Edward V. Farley, Jr., Christine M. Kondzela, James M. Murphy, and Angela Middleton. 2003. Stock-Specific Distribution and Migration of Juvenile Chum Salmon along the Eastern Bering Sea Shelf. NPAFC Tech. Report 5:27.

Online linkage: http://www.npafc.org/new/pub_technical5.html

Description:

Abstract:

Genetic stock identification techniques were used to identify the origin and provide stock-specific migration and distribution patterns of juvenile chum (Oncorhynchus keta) salmon caught during annual fall surveys (2002) along the eastern Bering Sea (Fig. 1). Preliminary results indicate that: 1) Yukon River Fall chum salmon are widely distributed from offshore of the Yukon River, eastward to 62°N, 172°W, and as far south as Nunivak Island (60°N), suggesting a southwesterly migration pathway along the Bering Sea shelf; 2) juvenile chum salmon from the Kuskokwim River are narrowly distributed south of Nunivak Island from the mouth of the Kuskokwim River, south to 58°N, and as far west as 168°W, suggesting a westerly migration pathway along the Bering Sea shelf; and 3) northern Russia juvenile chum salmon stocks (mainly stocks from rivers draining into the Gulf of Anadyr) are distributed as far east as 62°N, 171°W (Fig. 2). These results are unique in that they represent the first attempt to identify early marine distribution and migration of juvenile chum salmon stocks on the eastern Bering Sea shelf.

Purpose:

This data set contains the allozyme data used to identify chum salmon stocks captured in the Eastern Bering Sea in 2002.

Time period of content:

Time period information: Single date/time: Calendar date: 2002

Currentness reference: ground condition

Status:

Progress: Complete Maintenance and update frequency: None planned

Spatial domain:

Description of geographic extent:

Alaska, Bering Sea

Bounding coordinates:

West bounding coordinate: -172 East bounding coordinate: -168 North bounding coordinate: 62 South bounding coordinate: 58

Keywords:

Theme: Theme keywords: Biota, 002 Theme keyword thesaurus: ISO 19115 Topic Categories

Theme:

Theme keywords: genetic analyses, stock-specific migration Theme keyword thesaurus: None

Theme:

Theme keywords: chum salmon, Oncorhynchus keta Theme keyword thesaurus: ITIS

Place:

Place keywords: Alaska, Bering 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: 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: 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:

file://C:\Documents and Settings\fergussone\Local Settings\Temp\rad81968.htm

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:

Country: USA

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 Contact voice telephone: 907-789-6000 Contact facsimile telephone: 907-789-6094

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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: 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 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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