

AFSC/ABL: Sockeye salmon allozyme baseline - 1982-1990

Theme keywords: Biota, 002

Abstract: Genetic data were collected and prepared with the use of protein electrophoresis from 52 spawning locations in southeastern Alaska and northern British Columbia. Genetic relationships were examined from principal components analysis and unrooted trees constructed from genetic distances between collections. These descriptive analyses suggest a geographic basis to genetic divergence among populations. This geographic basis was confirmed using log-likelihood-ratio analysis and analyses of variance. Three groups of populations were observed: one from systems that drain into the inside waters of northern and central southeast Alaska; another from the far southeastern islands (including Prince of Wales Island); and the third in systems of the southern inside waters. Although the geographic structure was a statistically significant component of the overall genetic structure, gene diversity analysis indicates that only about 4.7% of the total genetic variability was attributable to genetic differences among those regions, whereas about 8.4% of the total was due to differences among populations within each region. The other 87.0% of the variation occurred, on average, within each collection.

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) [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: Chuck Guthrie, AFSC

Title:

AFSC/ABL: Sockeye salmon allozyme baseline - 1982-1990

Publication date: 1994

Geospatial data presentation form: maps and data

Series information:

Series name: NOAA processed report

Issue identification: 94-03

Description:

Abstract:

Genetic data were collected and prepared with the use of protein electrophoresis from 52 spawning locations in southeastern Alaska and northern British Columbia. Genetic relationships were examined from principal components analysis and unrooted trees constructed from genetic distances between collections. These descriptive analyses suggest a geographic basis to genetic divergence among populations. This geographic basis was confirmed using log-likelihood-ratio analysis and analyses of variance. Three groups of populations were observed: one from systems that drain into the inside waters of northern and central southeast Alaska; another from the far southeastern islands (including Prince of Wales Island); and the third in systems of the southern inside waters. Although the geographic structure was a statistically significant component of the overall genetic structure, gene diversity analysis indicates that only about 4.7% of the total genetic variability was attributable to genetic differences among those regions, whereas about 8.4% of the total was due to differences among populations within each region. The other 87.0% of the variation occurred, on average, within each collection.

Purpose:

This data set contains the baseline genetic data for sockeye salmon collections in SE AK.

Time period of content:

Time period information:

Range of dates/times:

Beginning date: 1982

Ending date: 1990

Currentness reference:

ground condition

Status:

Progress: Complete

Maintenance and update frequency: None planned

Spatial domain:

Description of geographic extent:

Southeast Alaska British Columbia

Bounding coordinates:**West bounding coordinate:** -139.4105556**East bounding coordinate:** -130.66222**North bounding coordinate:** 59.6325**South bounding coordinate:** 54.9541667**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: 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: nerka

Applicable common names: Sockeye
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: Chuck Guthrie

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: chuck.guthrie@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: Chuck Guthrie

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

Contact address:

Address type: mailing and physical

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17109 Point Lena Loop Road

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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.

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Metadata Reference Information:

Metadata date: 20081203

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:

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State or province: AK

Postal code: 99801

Country: USA

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

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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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