AFSC/ABL: 2006 Sockeye genetics

Theme keywords: Biota, 002

Abstract: The purpose of this study was to genetically analyze axillary process samples from ~6,000 sockeye salmon harvested in the 2006 and 2007 Districts 101 gillnet and 104 purse seine sockeye fisheries to determine proportions of Canadian and U.S. fish. A SNP genetic baseline of 45 SNPs (41 markers as 3 groups of SNPs are linked) assayed in 84 sockeye populations from southeast Alaska and British Columbia was developed by the ADF&G. The 84 populations were grouped into 14 regions. With the exception of locus One_Serpin, which failed during genotyping, the same markers were evaluated in the baseline and mixtures. Stock proportions were estimated using a Bayesian mixture analysis. In addition to performing mixture analysis for the 2006 and 2007 fisheries, the sockeye baseline was also expanded as part of the 2007 project. Approximately 1700 fish from 21 locations were genotyped, which will be included in a future updated baseline.

FGDC, ESRI, and Biological Profile Metadata:

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: Guthrie, Chuck, AFSC

Title:

AFSC/ABL: 2006 Sockeye genetics

Publication date: Unknown

Geospatial data presentation form: maps and data

Description:

Abstract:

The purpose of this study was to genetically analyze axillary process samples from ~6,000 sockeye salmon harvested in the 2006 and 2007 Districts 101 gillnet and 104 purse seine sockeye fisheries to determine proportions of Canadian and U.S. fish. A SNP genetic baseline of 45 SNPs (41 markers as 3 groups of SNPs are linked) assayed in 84 sockeye populations from southeast Alaska and British Columbia was developed by the ADF&G. The 84 populations were grouped into 14 regions. With the exception of locus One_Serpin, which failed during genotyping, the same markers were evaluated in the baseline and mixtures. Stock proportions were estimated using a Bayesian mixture analysis. In addition to performing mixture analysis for the 2006 and 2007 fisheries, the sockeye baseline was also expanded as part of the 2007 project. Approximately 1700 fish from 21 locations were genotyped, which will be included in a future updated baseline.

Purpose:

This dataset contains the genotype information for approximately 1700 fish from 21 locations to determine proportions of Canadian and U.S. fish.

Time period of content:

Time period information:

Single date/time:

Calendar date: 2006

Currentness reference:

ground condition

Status:

Progress: In work

Maintenance and update frequency: Unknown

Spatial domain:

Description of geographic extent:

Southeast Alaska

Bounding coordinates:

West bounding coordinate: -137.710

East bounding coordinate: -131.802

North bounding coordinate: 58.367

South bounding coordinate: 55.115

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: 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: 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.

Data set credit:
Northern Fund

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

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17109 Point Lena Loop Road
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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.

Back to Top

Metadata Reference Information:

Metadata date: 20081201
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

Back to Top