Plan Overview

A Data Management Plan created using DMP Tool

DMP ID: https://doi.org/10.48321/D12K5B

Title: Fraser River Sockeye Salmon Genetic Stock Identification from the Hakai Institute Juvenile Salmon Program

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Funder: Hakai Institute

Template: Digital Curation Centre

Project abstract:

Since 2015 the Hakai Institute has been monitoring Juvenile Salmon as they migrate through the Discovery Islands north out of the Salish Sea. Among other things, we're monitoring the relative abundance of various stocks of Fraser River sockeye salmon. The genetic stock identification (GSI) data is used to supplement numerous studies emanating from the Hakai Institute Juvenile Salmon Program for background contextual information. However, how the proportion of genetic stocks among years is interesting and important as a stand-alone use of these data. Therefore we propose to publish these data openly and produce a manuscript describing inter-annual changes of GSI proportions, especially as it relates to the Big Bar landslide that occurred sometime in 2019.

Start date: 05-12-2015

Last modified: 07-08-2024

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Fraser River Sockeye Salmon Genetic Stock Identification from the Hakai Institute Juvenile Salmon Program

Data Collection

What data will you collect or create?

We will use catch and species data produced by the Hakai Institute Juvenile Salmon program and genetic stock identification of sockeye data produced by the Molecular Genetics Lab at the Pacific Biological Station.

How will the data be collected or created?

Documentation and Metadata

What documentation and metadata will accompany the data?

A metadata record will be created using the CIOOS metadata intake form in the <u>Hakai Institute Data Catalogue</u>. This will then be federated to the Canadian Integrated Ocean Observing System metadata catalogue.

We will include scripts to process and analyze the data, as well as links or copies of relevant methods documents.

Ethics and Legal Compliance

How will you manage any ethical issues?

We've received approval from the UBC Animal Care Committee to collect these fish and the appropriate scientific collection permits from Fisheries and Oceans Canada. No other ethics or legal issues have been identified.

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues?

The data will be licensed for re-use under the <u>Creative Commons Attribution license</u>. There are no intellectual property rights associated with these data.

Storage and Backup

How will the data be stored and backed up during the research?

Data will be stored in a public GitHub repository at https://github.com/hakaiInstitute/jsp-data

How will you manage access and security?

The repository will be public access and there is no need for security because data are not sensitive.

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

All of the data have long-term value and will be retained, shared and preserved indefinitely.

What is the long-term preservation plan for the dataset?

The complete data set will be archived in the Hakai Institute organizational GitHub account at https://github.com/hakaiInstitute/jsp-gsi

The dataset will also be transformed to the OBIS-ENV Darwin Core Archive format and published to the Ocean Biodiversity Information and the Global Biodiversity Information Facility

Data Sharing

How will you share the data?

We will aim to publish a Data Descriptor in Nature's Scientific Data.

Are any restrictions on data sharing required?

Question not answered.

Responsibilities and Resources

Who will be responsible for data management?

Brett Johnson will be responsible for data management.

What resources will you require to deliver your plan?

Question not answered.

Planned Research Outputs

Dataset - "Hakai Institute Juvenile Salmon Program genetic stock identification of sockeye salmon"

Data paper - "Impacts of the Big Bar Landslide on sockeye salmon genetic stock proportions in the early marine environment"

Meant for publishing as a full article in a primary journal to assess the impacts of the Big Bar landslide on the relative proportions of sockeye stocks from above and below the landslide. This will address potential impacts on downstream survival of sockeye smolts migrating downstream through the affected area in 2019 and 2020. It will also address the impact of limited passage for adult sockeye migrating upstream in 2019 and the expected reduction in the relative proportion of recruits from stocks from originating above the slide compared to stocks below the slide.

Planned research output details

Title	Туре	Anticipated release date	Initial access level	Intended repository(ies)	Anticipated file size	License	Metadata standard(s)	May contain sensitive data?	May contain PII?
Hakai Institute Juvenile Salmon Program genetic st 	Dataset	2021-12-16	Open	Global Biodiversity Information Facility Ocean Biogeographic Information System		Creative Commons Attribution 4.0 International	EML (Ecological Metadata Language) ISO 19115	No	No
Impacts of the Big Bar Landslide on sockeye salmon	Data paper	2022-08-31	Open	None specified		Creative Commons Attribution 4.0 International	None specified	No	No

Related Works

Datasets

• Johnson, Brett, Julian Gan, Sean Godwin, Krystal Bachen, Tim van der Stap, and Brian Hunt. 2017. "Hakai Institute Juvenile Salmon Program." [Dataset]. Hakai Institute. <u>https://doi.org/10.21966/1.5666666</u>.