Licence Number: XR 96 2022 Valid From: 01-Apr-2022 Expiry Date: 31-Dec-2022

This licence and/or permit is issued under the authority of SECTION 52 OF THE FISHERY (GENERAL) REGULATIONS.

This licence and/or permit authorizes the person(s) listed below, subject to the following terms and conditions, to collect the species and quantity of fish identified below for: Scientific purposes. Non-compliance with any condition of this licence and/or permit may result in the cancellation of this licence and/or permit.

Licence/Permit Activity Description:

Research uses threespine stickleback to understand the causes of phenotypic diversity and the origin and persistence of species. In 2022 collection of marine stickleback will be from from Oyster Lagoon in Pender Harbor. The fish will be genotyped for several recently discovered chromosomal inversions on chromosomes 1, 11, and 21. A large number of fish will need to be genotyped because one of the inversion orientations is rarer in marine populations.

Licence Holder:

FIN: 121909

UNIVERSITY OF BRITISH COLUMBIA DEPT OF ZOOLOGY 6270

UNIVERSITY BLVD.

VANCOUVER BC V6T 1Z4

SCHLUTER, DOLPH

Contact Number: 604-822-2387 Fax Number: 604-822-2416

Species, Quantity of Fish, Area(s) and Gear:

Species: Threespine stickleback

Life Stage: Adult

Gear: Trap, Gee/Minnow

Licence Area: PFMA 16

To be 1000 Individual Pieces

Retained:

Reporting Requirements:

XR 96 2022 Due Date 31-Jan-23

Terms and Conditions:

This licence authorizes collections to be made by the licensee and employees, volunteers and students of the licensee provided that all persons, other than minors who are engaged in activities under the authority of this licence, are carrying suitable photo identification to be produced upon request of a Fishery Officer or Guardian.

Copies of this licence must accompany the collecting personnel, be on board any collecting vessel and be carried by the transport vehicle at all times during collection and transport of samples. The licence must be produced upon the request of a Fishery Officer or Guardian.

The DFO Office responsible for the area in which fishing takes place shall be notified on each occasion prior to the collection of samples. Notification shall occur by telephone during normal business hours. If you are unable to notify the local office on evenings or weekends, advise the DFO Radio Room at 1-800-465-4336 prior to sampling.



Licence Number: XR 96 2022 Valid From: 01-Apr-2022 Expiry Date: 31-Dec-2022

All gear left unattended must be clearly labelled with the Licence Number and must not interfere with the public right of navigation.

Collections within sites designated under provincial statutes (includes parks, conservancies, ecological reserves and other protected areas), on intertidal lands fronting First Nations reserves, or in aquaculture tenures licensed by the Province of BC, require the consent of the administrative authority or lease owner for the area.

A Section 56 Fishery (General) Regulations Permit is required for the transfer of live specimens between marine areas, or to holding tanks which discharge to marine waters. The licence holder is required to make application to the Federal/Provincial Introductions and Transfers Committee. Contact numbers and application forms are available from their website: http://www-heb.pac.dfo-mpo.gc.ca/intro trans/transfers e.htm

Copies of this licence must accompany the collecting personnel, be on board any collecting vessel and be carried with the transport vehicle at all times during collection and transport of samples. The licence must be produced upon the request of a Fishery Officer or Guardian.

Specimens retained under the authority of this licence may not be utilized, sold or processed for food or bait.

Retention of catch is permitted to the maximum specified on this licence. All catch in excess of the licence limit shall be released at the point of capture immediately following data recording.

Section 32 (1) of the federal Species at Risk Act prohibits killing, harming, harassing, capturing or taking an individual of a wildlife species which is listed on Schedule 1 as an extirpated species, an endangered species or a threatened species. Refer to the SARA Public Registry at http://www.sararegistry.gc.ca to determine if species at risk may be in your research area and to apply for a permit if required.

A report will be required by DFO at the end of the project

See attached documents.

By signing on this document, the person(s) listed below, agree to be bound by the terms and conditions that pertain to each person as an individual and to the group as a whole.

121909

Dolph Schluter

2022/03/22

FIN

Licence Holder - Print Name

Signature

Date

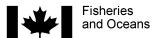
Licence Issued: 22 March 2022

Licence Printed: 22 March 2022

Licence Issued By: HEATHER BRAUN, Fisheries and Oceans Canada

Licence Prepared By:

Heather Braun



Pêches et Océans

Pacific Region
Heather Braun
Fisheries Management
Department of Fisheries and Oceans
Campbell River

Dear Scientific Licence Holder

Subject: Scientific Licence Holder Responsibilities

Attached is your Licence to Fish for Experimental, Scientific, Educational or Public Display Purposes issued under Section 52 of the Fisheries (General) Regulations.

The Licensee is responsible for ensuring that all necessary health and safety training has been completed by those persons working on the project, and that those persons working under authority of this licence will employ safe working conditions and practices according to the Canadian Labour Code, WorkSafe BC, or any other applicable regulations. The Licensee shall also comply with all guidelines and orders by local Health Authorities pertaining to COVID-19.

The following guidelines will ensure that you are in compliance with the Regulations:

- Call the local DFO office prior to collecting samples.
- Keep a copy of the licence with you during collections. If there are multiple collection sites operating, a copy must be with each site.
- A Section 56 Fishery (General) Regulations Permit is required for the transfer of live specimens between marine areas, or to holding tanks which discharge to marine waters. The licence holder is required to make application to the Federal/Provincial Introductions and Transfers Committee.
- A copy of the licence must accompany specimens if they are being transported.
- Conditions of Licence are legal requirements that must be followed by the licence holder. Not following these Conditions is a violation of the Fisheries Act. This includes, but is not limited to:
 - o Species limits; may not be exceeded under any circumstance.
 - Area licenced to fish.
 - Allowable gear types.
 - If your licence needs different species limits, or changed in any other way, you must apply for an amended licence prior to collecting any additional specimens.
- You must abide by the attached Reporting Requirements by the date specified as a Condition of Licence. The catch report must include all the details specified in the attachment.

Sincerely yours,



Braun, Heather Digitally signed by Braun, Heather Date: 2022.01.20 13:00:43 -08'00'

Heather Braun

heather.braun@dfo-mpo.gc.ca

Assistant Fishery Manager

Attachment: Scientific Licence, which may include reporting requirements and Area

maps

Reporting Requirements for Scientific Licence

Every scientific licence is required to report the following information about the specimens that were captured and lethally sampled or kept for an extended period of time. If, shortly after capture, the specimens were returned to the water unharmed then no report is necessary. An electronic report in either Windows Excel or Access shall be provided by the end-date of the scientific licence.

This report shall contain the following information:

- Licence Number and name of licencee
- Date of sampling
- Location (common name)
- Pacific Fishery Management Area (e.g. 14-7) Maps of Areas can be found at: http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/index-eng.htm
- Latitude and Longitude of collection site (do m.sss)
- Scientific name
- Common name
- Number and/or Weight (kilograms)

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In addition to the report described above, the scientific licence holder shall provide a description of the disposition of the specimens that were caught.

If your collections were for scientific investigation, answer the following questions:

- What analyses were done on the specimens?
- By whom were the analyses done?
- What were the preliminary results?

If your specimens were collected and sent elsewhere (e.g. universities, research institutions, laboratories), answer the following questions:

- What institution(s) did the specimens go to?
- For what purpose?

For educational or public display purposes, describe how the specimens were handled, what the display consisted of and/or what educational purpose the specimens were used for. Upon receipt by the Department of any data supplied by the licencee in accordance with conditions of licence, Section 20(1)(b) of the Access to Information Act prevents the Department from disclosing to a third party, records containing financial, commercial, scientific or technical information that is confidential information. Further, Section 20(1)(c) of the Act prevents the Department from giving out information, the disclosure of which could reasonably be expected to prejudice the competitive position of the scientific licence holder.

If you have any questions, please contact Heather Braun by phone (250-240-0713) or email (heather.braun@dfo-mpo.gc.ca).

DFO District Office Contact Numbers:

Office	Pacific Fishery Management Area where harvest/research will occur	Phone
South Coast Area:		
Port Hardy	Areas 11, 12, 27, 111, 127	250-949-6422
Nanaimo	Areas 13 to 17, 29-5	250-754-0230
Victoria	Areas 18, 19, 20	250-363-3252
Port Alberni	Areas 21 to 26, 121 to 126	250-720-4440
Fraser River Area:		
Steveston	Areas 28, 29	604-664-9250
North Coast Area:		
Queen Charlotte City	Areas 1, 2, 101, 102, 130, 142	250-559-4413
Prince Rupert	Areas 3, 4, 5, 6, 103 to 106	250-627-3428
Bella Coola	Areas 7 to 10, 107 to 110	250-799-5345

By Condition of Licence, the licence holder must report to the local DFO office prior to harvesting/sampling.

Provide the following information:

- Name on the licence and names of harvesters/samplers
- Licence number
- Dates and times when harvesting/sampling will occur
- Specific location where harvesting/sampling will occur
- Locations of any unattended gear (e.g. crab traps) and how long that gear will remain there.