



## PERMIT ISSUED UNDER SECTION 73 OF THE SPECIES AT RISK ACT

**Permit Number:** SARA-116

**Permit Authority:**

This permit is issued to the person(s) listed below under the authority of the Minister of Fisheries and Oceans pursuant to section 73 of the Species at Risk Act (SARA), and authorizes them, subject to the following terms and conditions, to engage in scientific research activities (described below) that relate to the conservation of the affected species identified below or benefit the said species or are required to enhance its (their) chance of survival in the wild. This permit is granted as a privilege, not property, and is issued at the Minister's discretion and may be revoked or amended to ensure the survival or recovery of a species.

**Authorized Person:**

Dolph Schluter  
Ubc Dept Of Zoology  
6270 University Blvd.  
Vancouver BC V6T 1Z4

**Assistant(s):**

Dr. Catherine Peichel, Dr. Matt Arnegard, Kerry Marchinko, Rowan Barrett, Jason Clarke, Mirjam Barrueto, Gina Conte, Patrick Tamkee, additional undergraduate students.

**Species and Catch Limits:**

Species / Population	Limit / Comment	
STICKLEBACK - BENTHIC PAXTON LAKE (GASTEROSTEUS)	100 Individuals (live)	~Individuals to be retained; anticipated mortality 100 individuals
STICKLEBACK - BENTHIC VANANDA LAKE (GASTEROSTEUS)	100 Individuals (live)	~Individuals to be retained; anticipated mortality 100 individuals
STICKLEBACK - LIMNETIC PAXTON LAKE (GASTEROSTEUS)	100 Individuals (live)	~Individuals to be retained; anticipated mortality 100 individuals
STICKLEBACK - LIMNETIC VANANDA LAKE (GASTEROSTEUS)	100 Individuals (live)	~Individuals to be retained; anticipated mortality 100 individuals

Retention of specimens collected Authorized

**Area of Activity:**

South Coast  
Paxton Lake, Texada Island  
Priest Lake, Texada Island

**Authorized Activities:**

Minnow Trap  
Dip Net  
Seine Net



Samples will be retained and kept in aquaria at UBC for study.

Collection of benthic and limnetic sticklebacks for:

- Laboratory crosses to identify the genes that distinguish populations and species;
- Supplementing local brood stocks;
- Studying the environmental factors that influence assortative mating between the species; and
- Studying the adaptive significance of pelvic girdle loss in the benthic species.

This work will continue to provide baseline ecological and genetic information for management of the stickleback species pairs, and monitor changes occurring in the species.

**Terms and Conditions:**

Pursuant to subsection 73(6) of SARA, the following terms and conditions apply to this permit:

- 1) This permit is only valid for the activities described above. It (or a copy) must be carried by a member of the field crew and be made available to a Fishery or Conservation Officer upon request.
- 2) This permit does not replace any other permits required under provincial or federal legislation.
- 3) The death of any individual of the affected species identified above, resulting from activities authorized by this permit, shall be reported immediately to the regional coordinator identified below.
- 4) This permit does not include collection from Emily Lake.
- 5) Collection sites in Paxton and Priest lakes are to be limited to those recommended in The Guidelines for the Collection and In Situ study of Stickleback Species Pairs (*Gasterosteus* spp) May 2, 2008.
- 6) By December 31, 2009, a comprehensive report must be filed detailing any activity, authorized by this permit, which results in killing, harming, harassing, capturing or taking of any individuals of the affected species above. If the individuals were captured and are being held then you must also indicate where they are being held and what is planned for these captured individuals (death, release, etc.). The completed report shall be sent to:

Courtney Druce  
200-401 Burrard St.  
Vancouver, BC  
V6C 3S4  
T: 604.666.2792  
F: 604.666.3341  
E: Courtney.Druce@dfo-mpo.gc.ca



**Duration of Permit:** This permit is valid from Mar 1, 2009 until Nov 30, 2009.

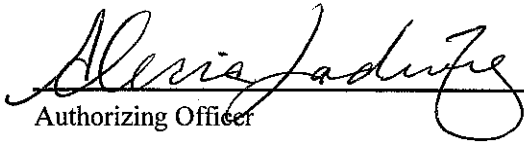
Date of issue: Feb 23, 2009

**This permit is not valid until read and signed by the authorized person, signifying agreement with the conditions of permit:**

I hereby certify that I am the authorized person named above (Dolph Schluter) and that I have read and understand the conditions of this permit,

Dolph Schluter		April 1, 2009
Print Name	Signature	Date

**Signature of Authorizing Officer:**

	Feb 24 / 09
Authorizing Officer	Date

Karen Calla  
Project Manager

Fisheries & Oceans Canada, Pacific Region  
#200-401 Burrard St.  
Vancouver, BC V6C 3S4  
on behalf of the Minister of Fisheries & Oceans Canada

**Further Information** about this permit is available from the above authorizing officer or from [SARA@pac.dfo-mpo.gc.ca](mailto:SARA@pac.dfo-mpo.gc.ca)