REGISTRATION(S) AND/OR FISHING LICENCE(S)

This document authorizes the registration card holder and/or licence holder to engage in fishing and related activities on the Atlantic coast of Canada subject to the provisions of the Fisheries Act and Regulations made thereunder.

This licence and/or registration is issued under the authority of the Minister of Fisheries and Oceans Canada.

11203591

CALENDAR YEAR 2012

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HOMEPORT

12101 HALIFAX

FIN 7-000145-26

UNIVERSITY OF BRITISH COLUMBIA 301 - 1352 WEST 10TH AVE.

VANCOUVER, BC V6H 1J6

Licence(s) - 2012

Licence # Species Areas Licence Type Gear Permitted Amt VRN LOA

336376 STICKLEBACK UNKNOWN

TO BE OPERATED BY KIERAN SAMUK, UNIVERSITY OF BRITISH COLUMBIA, AND QUALIFIED PERSONS WORKING UNDER THEIR DIRECTION.

PURPOSE: GENETIC AND PHENOTYPIC STUDIES

GEAR: 5 SEINE NETS, 10 MINNOW TRAPS, 2 HAND NETS

LOCATIONS: GRAND RIVER ESTUARY, PIRATE HARBOUR, MIDDLE MELFORD, ST. FRANCIS HARBOUR, MILFORD HAVEN RIVER, SALMON RIVER ESTUARY, HALFWAY COVE, GLASGOW HEAD INLET, PORT FELIX INLET, WINE HARBOUR, SPANISH SHIP BAY, QUODDY RIVER ESTUARY, SHEET HARBOUR PASSAGE, SHIP HARBOUR, TAYLORS HEAD, HEAD OF ST. MARGARETS BAY.

RETENTIONS: 60 FISH FOR EVERY SITE FOR A MAXIMUM OF 900 FISH IN TOTAL FOR THE PROJECT AND A MAXIMUM OF4400 STICKLEBACK EGGS

DISPOSITION: LIFE FISH WILL BE RETURNED TO THE UBC LABORATORY WHERE THE WILL BE QUARANTINED AND USED IN SCIENTIFIC ANALYSIS.

DATES OF ACTIVITIES: JUNE 5, 2012 TO AUGUST 10, 2012

DESIGNATED OPERATOR STATUS

SCIENTIFIC, EXPERIMENTAL AND/OR EDUCATIONAL LICENCE

PURSUANT TO SECTION 52 OF THE FISHERY (GENERAL) REGULATIONS, THIS LICENCE IS HEREBY ISSUED TO FISH FOR FINFISH FOR SCIENTIFIC, EXPERIMENTAL AND EDUCATIONAL PURPOSES, SUBJECT TO THE FOLLOWING CONDITIONS:

- 1. THAT THIS LICENCE DOES NOT AUTHORIZE COLLECTIONS OF FISH IN ANY MARINE PROTECTED AREAS (MPA) UNLESS A SEPARATE MPA PERMIT IS ATTACHED;
- 2. THAT ONLY THOSE LOCATIONS LISTED ABOVE ARE PERMITTED TO BE FISHED. THE GEAR AND ANY TAGS ISSUED UNDER THIS LICENCE, VESSELS AND THE SPECIES AND NUMBERS THAT ARE PERMITTED TO BE RETAINED ARE ALSO LISTED ABOVE; ALL OTHER FISH CAUGHT THAT ARE NOT LISTED WILL BE IMMEDIATELY RETURNED TO THE WATERS FROM WHICH THEY WERE TAKEN WITH THE LEAST AMOUNT OF HARM;
- 3. THAT THE AREA OF OPERATIONS IS LIMITED TO THOSE WATERS UNDER THE JURISDICTION OF THE DEPARTMENT OF FISHERIES AND OCEANS (DFO), MARITIMES REGION;
- 4. THAT ANY UNATTENDED GEAR MUST HAVE CLEAR MARKINGS ON IT IDENTIFYING THE LICENCE NUMBER AND CONTACT PERSON WITH AN EMERGENCY CONTACT NUMBER;
- 5. THAT ANY RECREATIONAL ANGLERS ANGLING IN INLAND WATERS OPERATING UNDER THE SUPERVISION OF THE LICENCE HOLDER AND UNDER THE AUTHORITY OF THIS LICENCE WHO ARE NOT EMPLOYED BY THE DEPARTMENT OF NATURAL RESOURCES OR EMPLOYED BY ANOTHER PROVINCIAL OR FEDERAL GOVERNMENT AGENCY, MUST BE IN POSSESSION OF A PROVINCIAL GENERAL ANGLING LICENCE AND MUST CARRY A COPY OF THIS LICENCE WITH THEM;
- 6. THAT ELECTROFISHING IS ONLY TO BE CONDUCTED FROM JUNE 1 TO SEPTEMBER 30 AND/OR WHEN WATER TEMPERATURES ARE BELOW 22 DEGREES CELSIUS.

a condition of this licence that the registration holder/licencee sign all pages of this document.

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April 5, 2012

DATE

AMENDMENT

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4	Fisheries and Oceans Canada	Pêches et Océans			
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12101 HALIFAX

Gear Permitted Areas Licence # Species Licence Type Amt **VRN** LOA

- THAT ELECTROFISHING MAY BE CONDUCTED FROM JANUARY 1 TO DECEMBER 31 FOR FISH RESCUES 7. ONLY;
- 8. THAT ANY PERSONS TRANSFERRING LIVE FISH OR INTRODUCING LIVE FISH INTO AQUATIC HABITAT MUST BE IN POSSESSION OF A SECTION 56 TRANSFER LICENCE ISSUED UNDER THE FISHERY GENERAL REGULATIONS WITH THE APPROVAL OF THE NOVA SCOTIA INTRODUCTIONS AND TRANSFERS COMMITTEES FOR TRANSFERS INTO OR WITHIN NOVA SCOTIA OR THE NEW BRUNSWICK INTRODUCTIONS AND TRANSFERS COMMITTEE FOR TRANSFERS INTO OR WITHIN NEW BRUNSWICK;
- 9. THAT, EXCEPT FOR THE TIME REQUIRED TO RECORD DATA, I.E., LENGTHS, WEIGHTS, SCALE OR FIN SAMPLES, ALL FISH MUST BE IMMEDIATELY RETURNED TO THE WATERS FROM WHICH THEY WERE TAKEN WITH THE LEAST POSSIBLE HARM;
- 10. THAT ANY FISH RETAINED AS PART OF, SCIENTIFIC ANALYSIS, REPRESENTATIVE SAMPLES AND/OR RESEARCH MUST BE PRESERVED AND RETAINED AT THE INSTITUTION CONDUCTING THE STUDIES OR DISPOSED OF IN A SANITARY MANNER AT THE END OF THE OPERATIONS;
- THAT ANY FISH RETAINED ALIVE MUST BE MAINTAINED IN AND PREVENTED ESCAPE FROM A CLOSED-CIRCULATION SYSTEM WITH STERILE DISPOSAL OF ALL EFFLUENT AND ALL DEAD SPECIMENS MUST BE DISPOSED OF IN A SANITARY MANNER;
- 12. THAT THIS LICENCE DOES NOT AUTHORIZE FISHING FOR SPECIES THAT ARE LISTED AS "ENDANGERED" OR "THREATENED" NOR DOES THIS LICENCE AUTHORIZE FISHING IN WATERS IN WHICH "ENDANGERED" OR "THREATENED" SPECIES ARE KNOWN TO BE FOUND, INCLUDING:
- " THE WATERS OF MINAMKEAK LAKE, MILLIPSIGATE, HEBB LAKE, LUNENBURG CO., NS UPSTREAM FROM THE DAM AT ITS OUTLET, INCLUDING THE WATERS JOINING THESE LAKES KNOWN TO SUPPORT ATLANTIC WHITEFISH, BUT NOT INCLUDING OTHER TRIBUTARIES TO THEM; AND
- KNOWN TO SUPPORT SPAWNING BY DWARF LAKE UTOPIA, CHARLOTTE CO., NB AND TRIBUTARIES THEREOF SMELT; AND
- " THE WATERS OF INNER BAY OF FUNDY RIVERS KNOWN TO SUPPORT ENDANGERED ATLANTIC SALMON AND LISTED IN THE ATTACHED SCHEDULE I AND TRIBUTARIES THEREOF;
- 13. THAT THE CONSERVATION AND PROTECTION OFFICE CLOSEST TO THE AREA OF OPERATIONS BE GIVEN AT LEAST 24 HOURS ADVANCE NOTIFICATION OF THE DETAILS AND LOCATIONS OF THE COLLECTIONS:

IN NEW BRUNSWICK:

- ST. GEORGE 506-755-5000, PH:
- SAINT JOHN PH: 506-636-5051
- FREDERICTON PH: 506-452-3018:

IN NOVA SCOTIA:

- SYDNEY PH: 902-564-2579
- TUSKET PH: 902-648-5000
- SHELBURNE PH: 902-875-2360
- BRIDGEWATER PH: 902-527-5574
- PH: 902-522-2832 SHERBROOKE LIVERPOOL 902-354-6030 PH:
- DARTMOUTH 902-426-9010 PH:
- 902-645-2045 METEGHAN PH:
- DIGBY PH: 902-245-2544
- BARRINGTON PH: 902-637-2851

FISHER

- 14. THAT A COPY OF THIS LICENCE BE CARRIED DURING THE COLLECTIONS AND BE AVAILABLE FOR INSPECTION UPON REQUEST BY A FISHERY OFFICER;
- 15. THAT AN ANNUAL REPORT ON ACTIVITIES CONDUCTED UNDER AUTHORITY OF THIS LICENCE INCLUDING DATES, LOCATIONS, SPECIES CAUGHT, NUMBERS CAUGHT, WATER TEMPERATURES, MORTALITIES, CONCLUSIONS, ETC. MUST BE PROVIDED ELECTRONICALLY TO DR. ROSS CLAYTOR, POPULATION ECOLOGY DIVISION, DFO, E-MAIL: ROSS.CLAYTOR@DFO-MPO.GC.CA;

condition of this licence that the registration holder/licencee sign all pages of this document.

April 5, 2012

DATE

IDMENT

*	Fisheries and Oceans Canada	Pêches et Océans
— —	Canada	Canada

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16. THAT THIS LICENCE IS VALID FROM DATE OF ISSUE UNTIL DECEMBER 31, 2012;

17. THAT ISSUANCE OF THIS LICENCE IMPLIES NO COMMITMENT BY THE MINISTER OR THE DEPARTMENT OF FISHERIES AND OCEANS TO REISSUE THE LICENCE IN SUBSEQUENT YEARS.

NOTE:

NOTHING IN THIS LICENCE SHALL BE CONSTRUED AS AUTHORITY UNDER SECTION 73 OF THE SPECIES AT RISK ACT (SARA) TO KILL, HARM, HARASS, CAPTURE OR TAKE AN INDIVIDUAL OF A WILDLIFE SPECIES THAT IS LISTED AS "EXTIRPATED", "ENDANGERED" OR "THREATENED" AS IDENTIFIED IN SCHEDULE 1 OF SARA. IF THE ACTIVITY AUTHORIZED IN THIS LICENCE IS EXPECTED TO INTERACT WITH AN "EXTIRPATED", "ENDANGERED" OR "THREATENED" SPECIES, A HARM PERMIT WITHIN THE TERMS OF SECTION 73 OF SARA MUST BE IN YOUR POSSESSION. FOR MORE INFORMATION ON SARA, PHONE 1-866-891-0771 OR GO TO WWW.SARAREGISTRY.GC.CA.;

The use of ALL of these licence(s) is subject to any conditions which are issued by D.F.O. The licence holder must ensure that they have received the licence conditions, and may NOT conduct any fishing activity with any of these licence(s) unless in receipt of the licence conditions.

a condition of this licence that the registration holder/licencee sign all pages of this document.

DATE

April 5th, 2012

AMENDMENT