



ACCESS/NEERS SPRING 2010 JOINT MEETING

13-16 May 2010

St. Andrews by-the-Sea, New Brunswick, Canada
W.C. O'Neill Arena Complex

MEETING PROGRAM

Thursday, May 13th

6:00 – 8:00 pm Welcoming Social
6:00 – 8:00 pm Meeting Registration
8:00 pm Dinner on your own in St. Andrews

Friday, May 14th

7:00 – 8:00 am Meeting Registration
8:00 am – 12:00 pm Trans-Boundary Symposium
12:00 – 1:15 pm Lunch
1:15 – 2:35 pm Oral Presentations: Habitat Change / Monitoring
2:35 – 3:55 pm Poster Presentations
3:55 – 5:35 pm Oral Presentations: Salt Marsh and Sandy Beach Ecology
5:35 – 6:15 pm ACCESS & NEERS Business Meetings
6:15 – 7:00 pm Social and Poster Viewing
7:00 – 9:00 pm Banquet
9:00 pm – ?? Live Music and Dancing at The Red Herring

Saturday, May 15th

8:30 – 10:10 am Oral Presentations: Nearshore Ecology / Invasive Species
10:30 am – 12:30 pm Oral Presentations: Faunal Ecology
12:30 – 1:45 pm Lunch
1:45 – 3:45 pm Oral Presentations: Seagrass Dynamics
4:05 – 5:25 pm Oral Presentations: Nearshore and Coastal Ecosystems
5:25 pm Awards and Adjourn Meeting (optional field trip on Sunday)

Sunday, May 16th

Optional field trip to Dipper Harbour Marsh and Saints Rest Marsh



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Coastal and Estuarine Research Foundation

Friday, May 14th

8:00 Welcome

SPECIAL SYMPOSIUM
Trans-Boundary Issues: Effecting Policy and Management Change
Through Estuarine and Coastal Research
Learning from our Neighbours

Chair: Simon Courtenay

* Presenter; (G) Candidate for graduate student presentation prize

8:15 Boynton, Walter
President-elect, Coastal and Estuarine Research Federation
Welcome and opening remarks

8:30 Daborn, Graham
Honorary Research Associate, Acadia Centre for Estuarine Research
FUNDY TIDAL POWER AND ITS TRANS-BOUNDARY IMPLICATIONS

9:20 Feurt, Christine
Dept. of Environmental Studies, University of New England Biddeford, ME
COLLABORATIVE LEARNING STRATEGIES TO OVERCOME BARRIERS TO
ECOSYSTEM MANAGEMENT IN COASTAL WATERSHEDS OF THE GULF OF
MAINE

9:40 Ouellette*, Marc and R. Cormier
Fisheries and Oceans Canada, Gulf Fisheries Centre, Oceans and Science Branch,
Moncton, NB
COASTAL MANAGEMENT: BRIDGING THE LAND-WATER DIVIDE

10:00 BREAK

Chair: Stephen Hale

10:20 Short, Fred T.
Dept. of Natural Resources and the Environment, Univ. of New Hampshire, Jackson
Estuarine Laboratory, Durham, NH
THE LOOMING EELGRASS CRISIS

10:40 (G) Torio*, Dante D.¹, A. S. Grant², and G. L. Chmura¹
McGill University, Montreal, QC: ¹Department of Geography and Global Environmental
and Climate Change Centre; ²Earth System Science Program
HOW DO WE ASSESS THE SUSCEPTIBILITY OF SALT MARSHES TO COASTAL
SQUEEZE?

11:00 Vercaemer*, Bénédikte¹, D. Sephton¹, J. T. Johnson², A. MacIsaac², J.-M. Nicolas¹, J. Keays¹
¹Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, NS
² Eskasoni Fish and Wildlife Commission, Eskasoni, NS
MONITORING AQUATIC INVASIVE SPECIES: A CASE STUDY OF TUNICATE BIOFOULING AND GREEN CRAB ABUNDANCE IN THE BRAS D'OR LAKES NS

11:20 Tilburg*, Christine M.¹, S. Russell-Robinson², and K. Parlee³
¹Gulf of Maine Council, Falmouth, ME
²U.S. Department of the Interior, Reston, VA
³Environment Canada, Halifax, NS
FOLLOWING THROUGH: INDICATORS IN THE GULF OF MAINE

11:40 Hanson, J. Mark
Fisheries and Oceans Canada, Gulf Fisheries Centre, Oceans and Science Branch, Moncton, NB
CANADA'S DIMINISHED TAXONOMIC CAPACITY – THE CONSEQUENCES OF INDIFFERENCE

12:00 LUNCH - provided

Habitat Change / Monitoring

Chair: Tim Rawlings

* Presenter; **(G)** Candidate for graduate student presentation prize

1:15 **(G)** Musetta-Lambert*, Jordan¹ and S. Courtenay²
¹Canadian Rivers Institute, Department of Biology, University of New Brunswick, Fredericton, NB
²Fisheries and Oceans Canada at the Canadian Rivers Institute
ASSESSING HABITAT PRODUCTIVE CAPACITY OF ARTIFICIAL ROCKY STRUCTURES AT VARYING SPATIAL AND TEMPORAL SCALES IN THE SOUTHERN GULF OF ST. LAWRENCE

1:35 **(G)** Pater*, Christina¹, S. Courtenay², M. van den Heuvel³, and K. Teather³
¹Canadian Rivers Institute, Department of Biology, University of New Brunswick, Fredericton NB
²Fisheries and Oceans Canada at the Canadian Rivers Institute
³Biology Department, University of Prince Edward Island, Charlottetown, PEI
NORTHERN PIPEFISH: A VICTIM OF HABITAT DEGRADATION?

1:55 Kilada, Raouf
Department of Biology, University of New Brunswick, Saint John, NB
CALCIFIED STRUCTURES IN AQUATIC ANIMALS: TIME KEEPERS AND WHAT ELSE?

- 2:15** Bugden, G.¹, M. van den Heuvel², K. MacQuarrie³, Cynthia Crane^{4*}, B. Raymond⁴, and H. Vandermeulin¹
¹Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, NS
²Biology Department, University of Prince Edward Island, Charlottetown, PEI
³Department of Civil Engineering, University of New Brunswick, Fredericton, NB
⁴Watershed Management Section, PEI Department of Environment, Energy and Forestry, Charlottetown, PEI
THE USE OF THE CCME NUTRIENT GUIDANCE FRAMEWORK TO DEVELOP NUTRIENT CRITERIA FOR PEI ESTUARIES

2:35 – 3:55 BREAK AND POSTER PRESENTATIONS

Posters are listed at the end of the program

Salt Marsh and Sandy Beach Ecology

Chair: Robert Buchsbaum

* Presenter; **(G)** Candidate for graduate student presentation prize; **(U)** Candidate for undergraduate student presentation prize

- 3:55** **(G)** Fussell*, Sandra B.¹, T. A. Theodose¹, and M. Dionne²
¹Department of Biological Sciences, University of Southern Maine, Portland, ME
²Wells National Estuarine Research Reserve, Wells, ME
MAPPING AND ANALYZING *PHRAGMITES AUSTRALIS* EXPANSION IN RESPONSE TO ANTHROPOGENIC FACTORS
- 4:15** **(U)** Griffith, Daniel
Department of Biology, Vassar College, Poughkeepsie, NY
SPARTINA ALTERNIFLORA'S (POACEAE) PECULIAR RELATIONSHIP WITH SULFIDE
- 4:35** **(G)** Wilson*, Kristin R.¹, J. T. Kelley², A. Reeve², and D. F. Belknap²
University of Maine, Orono, ME: ¹Program in Ecology and Environmental Sciences;
²Department of Earth Sciences
DOES GROUNDWATER FLOW CONTROL SURFICIAL SALT MARSH POOL MORPHOLOGY? A CASE STUDY FROM GRAND MARSH, GOULDSBORO, ME
- 4:55** **(G)** Mitchell*, Elizabeth E.¹ and K. A. Wilson²
¹University of Southern Maine Department of Biology, ME
²University of Southern Maine Department of Environmental Science and Policy
VEGETATION RESPONSE TO PREDICTED INCREASED TIDAL MARSH INUNDATION IN NORTHERN NEW ENGLAND BRACKISH MARSHES: A PROPOSAL
- 5:15** **(G)** MacMillan*, Mitchell and P. Quijon
Department of Biology, University of Prince Edward Island, Charlottetown, PEI
SANDY BEACH ECOLOGY: THE EFFECTS OF EROSION RATE AND BEACH TYPE ON INVERTEBRATE COMMUNITIES

5:35 ACCESS and NEERS Business Meetings

6:15 SOCIAL and POSTER VIEWING

7:00 BANQUET

Speaker: Art MacKay, Past Executive Director of the St. Croix Estuary Project
QUODDY – A SPECIAL PLACE BETWEEN THREE WORLDS. WHAT YOU
NEED TO KNOW ABOUT WHERE YOU'RE AT!

9:00 LIVE MUSIC at THE RED HERRING

Saturday, May 15th

Nearshore Ecology / Invasive Species

Chair: Melisa Wong

* Presenter; (G) Candidate for graduate student presentation prize; (U) Candidate for undergraduate student presentation prize

- 8:30** (G) Boudreau*, Melanie and D. Hamilton
Department of Biology, Mount Allison University, Sackville, NB
DIRECT AND INDIRECT INTERACTIONS AMONG PREDATORS WITHIN AN INTERTIDAL MUSSEL BED
- 8:50** (U) Quinn*, Brady, M. Boudreau, and D. Hamilton
Department of Biology, Mount Allison University, Sackville, NB
INTERACTIONS BETWEEN INVERTEBRATE PREDATORS IN INTERTIDAL MUSSEL BED COMMUNITIES
- 9:10** (G) Rossong*, Melanie^{1,2}, P. Quijon², J. Williams³, and P. Snelgrove¹
¹Ocean Sciences Centre, Memorial University of Newfoundland, St. John's, NL
²Biology Department, University of Prince Edward Island, Charlottetown, PEI
³Biology Department, St. Francis Xavier University, Antigonish, NS
FORAGING BEHAVIOUR OF JUVENILE AMERICAN LOBSTERS (*HOMARUS AMERICANUS*) IN THE PRESENCE OF AN INVASIVE CRAB
- 9:30** (G) Haarr*, Marthe Larsen and R. Rochette
Department of Biology, University of New Brunswick, Saint John, NB
GEOGRAPHIC VARIANCE IN ANTAGONISTIC INTERACTIONS BETWEEN INVASIVE GREEN CRABS *CARCINUS MAENAS* AND JUVENILE LOBSTERS *HOMARUS AMERICANUS*
- 9:50** (G) Wilcox*, Mark and R. Rochette
Department of Biology, University of New Brunswick, Saint John, NB
VARIATION IN CHELAE MORPHOLOGY AND DIET OF THE GREEN CRAB (*CARCINUS MAENAS*) ALONG THE SOUTHWESTERN SHORE OF NEW BRUNSWICK
- 10:10 BREAK**

Faunal Ecology

Chair: Martha Jones

* Presenter; (G) Candidate for graduate student presentation prize

- 10:30 (G) Tomie***, Jared¹, D. Cairns², and S. Courtenay³
¹Department of Biology, University of New Brunswick, Fredericton, NB
²Fisheries and Oceans Canada, Charlottetown, PEI
³Fisheries and Oceans Canada at the Canadian Rivers Institute, Department of Biology, University of New Brunswick, NB
SUBSTRATE PREFERENCE AND BURROWING BEHAVIOUR OF THE AMERICAN EEL (*ANGUILLA ROSTRATA*)
- 10:50 (G) Sweezy***, Michael¹, M. Clement², and S. Courtenay³
¹Canadian Rivers Institute, Department of Biology, University of New Brunswick, Fredericton, New Brunswick
²Fisheries and Oceans Canada, Gulf Fisheries Centre, Oceans and Science Branch, Moncton, NB
³Fisheries and Oceans Canada at the Canadian Rivers Institute
SEASONAL MIGRATIONS AND MICROHABITAT USAGE OF THE AMERICAN EEL IN THE UPPER SALMON RIVER, ALMA, NB
- 11:10 (G) Daigle***, Remi and A. Metaxas
Department of Oceanography, Dalhousie University, Halifax, NS
EFFECT OF THERMAL STRATIFICATION ON THE VERTICAL DISTRIBUTION OF MARINE INVERTEBRATE LARVAE
- 11:30 (G) Lloyd***, Michelle and A. Metaxas
Department of Oceanography, Dalhousie University, Halifax, NS
PATTERNS IN THE VERTICAL DISTRIBUTION OF LARVAE OF MARINE BENTHIC INVERTEBRATES
- 11:50 Mayrand***, Elise¹, M. Ouellette², and M.-E. Michon¹
¹Secteur des Sciences, Université de Moncton campus de Shippagan, Shippagan, NB
²Ministère des Pêches et des Océans Canada, Centre des Pêches du Golfe, Moncton, NB
INGESTION OF BIVALVE LARVAE BY THE AMERICAN OYSTER *CRASSOSTREA VIRGINICA*: A FIELD STUDY
- 12:10 Rawlings***, Timothy¹, J. Aker¹, and P. Brunel²
¹Department of Biology, Cape Breton University, Sydney, NS
²Département de sciences biologiques, Institut québécois de la biodiversité (IQBIO), Université de Montréal, Montréal, Quebec
EXTENDING THE NORTHERN DISTRIBUTIONAL LIMITS OF THE SLIPPER LIMPET, *CREPIDULA FORNICATA*, IN THE NORTHWESTERN ATLANTIC
- 12:30 LUNCH – provided**

Seagrass Dynamics

Chair: Hilary Neckles

* Presenter; (G) Candidate for graduate student presentation prize

- 1:45** (G) Felch*, Jonathan H. and F. T. Short
Dept. of Natural Resources and the Environment, Univ. of New Hampshire, Durham, NH
SEDIMENT ACCUMULATION AND EROSION IN EELGRASS BEDS MEASURED
WITH SURFACE ELEVATION TABLES (SET)
- 2:05** (G) Skinner*, Marc¹ and S. Courtenay²
¹Canadian Rivers Institute, Department of Biology, University of New Brunswick,
Fredericton, NB
²Fisheries and Oceans Canada at the Canadian Rivers Institute
IMPACT OF SUSPENDED OYSTER AQUACULTURE ON EELGRASS
PHOTOSYNTHESIS, GROWTH RATE AND DISTRIBUTION
- 2:25** (G) Novak*, Alyssa B. and F. T. Short
Dept. of Natural Resources and the Environment, Univ. of New Hampshire, Durham, NH
LEAF REDDENING IS CAUSED BY ANTHOCYANINS, MODIFIES PLANT
PHYSIOLOGY AND MORPHOLOGY, AND SERVES A PHOTO-PROTECTIVE
ROLE IN *THALASSIA TESTUDINUM*
- 2:45** Kidder*, George W., J. E. Disney, and M. Miller
Mt. Desert Island Biological Laboratory, Salisbury Cove, ME
FINE-SCALE CURRENT MAPPING AS A GUIDE TO EELGRASS RESTORATION
- 3:05** Wong, Melisa C.
Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, NS
DYNAMICS OF EELGRASS (*ZOSTERA MARINA*) ON THE SOUTH SHORE OF
NOVA SCOTIA
- 3:25** Perrin, Stephen G.
Friends of Taunton Bay. P.O. Box 585, Bar Harbor, ME
EELGRASS IN TAUNTON BAY 1955-2009, FEATURING THE GREAT DIEBACK
OF 2001: WHY DID IT HAPPEN?

3:45 BREAK

Nearshore and Coastal Ecology

Chair: Pam Morgan

- 4:05** Manson*, Gavin, D. Whalen, D. Frobel, M. Plewes, and D. Forbes
Geological Survey of Canada, Bedford Institute of Oceanography, Dartmouth, NS
ON THE GEOMORPHOLOGY OF COLE HARBOUR ESTUARY: A
CONTRIBUTION TO THE MANAGEMENT OF A MULTI-USE COASTAL
ENVIRONMENT

- 4:25** Rozsa, Ron
210 Amidon Road, Ashford, CT
MARSH LUNACY - THE ROLE OF THE METONIC CYCLE IN TIDAL WETLAND
VEGETATION CHANGE
- 4:45** Bugden*, Gary, G. Lazin, T. Milligan, B. Law, and E. Horne
Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, NS
REMOTE SENSING OF SUSPENDED PARTICULATE MATTER
CONCENTRATIONS IN THE COASTAL WATERS OF ATLANTIC CANADA
- 5:05** Buchsbaum, Robert
Massachusetts Audubon Society, Wenham, MA
THE ALLENS POND SAGA: HOW SHIFTING SANDS ALTERED A SALT MARSH
AND CHANGED THE TRAJECTORY OF A RESTORATION PROJECT
- 5:25** AWARDS and ADJOURN

Sunday, May 16th

Field trip to Dipper Harbour Marsh and Saints Rest Marsh

Leader: Gail Chmura, McGill University

Departure time, meeting place, and carpooling details will be available at the registration desk.

POSTER PRESENTATIONS

* Presenter; (G) Candidate for graduate student poster prize; (U) Candidate for undergraduate student poster prize

(G) Bursey*, Laura and M. Barbeau

Department of Biology, University of New Brunswick, Fredericton, NB

ABUNDANCE OF RIBBED MUSSELS (*GEUKENSIA DEMISSA*) IN MICRO- AND MACROTIDAL SALT MARSHES IN ATLANTIC CANADA: A PRELIMINARY STUDY

(G) Campbell* Dollie¹, C. Wall¹, M. Jones², D. Cone¹ and R. Bradford³

¹Department of Biology, Saint Mary's University, Halifax, NS

²Department of Biology, Cape Breton University, Sydney, NS

³Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, NS

DISTRIBUTION OF THE INVASIVE SWIMBLADDER NEMATODE (*ANGUILLICOLOIDES CRASSUS*) INFECTING AMERICAN EEL (*ANGUILLA ROSTRATA*) IN THE MARITIMES REGION

(G) Coffin*, Michael¹, M. Barbeau¹, and D. Hamilton²

¹Department of Biology, University of New Brunswick, Fredericton, NB

²Department of Biology, Mount Allison University, Sackville, NB

EFFECT OF THE MUD SNAIL *ILYANASSA OBSOLETA* ON VITAL RATES AND BEHAVIOURS OF THE AMPHIPOD *COROPHIUM VOLUTATOR*

(G) Debertin*, Allan¹, S. Courtenay², and J.M. Hanson³

¹Canadian Rivers Institute, Department of Biology, University of New Brunswick, Fredericton, NB

²Fisheries and Oceans Canada at the Canadian Rivers Institute

³Fisheries and Oceans Canada, Gulf Fisheries Centre, Oceans and Science Branch, Moncton, NB

TOWARDS QUANTIFYING THE STRUCTURE OF THE PELAGIC FOOD WEB OF NORTHUMBERLAND STRAIT

Dettmann*, Edward H. and H. A. Walker

USEPA, Office of Research and Development, National Health and Environmental Effects

Research Laboratory, Atlantic Ecology Division, Narragansett, RI

A SIMPLE MODEL OF NITROGEN CONCENTRATION, THROUGHPUT, AND DENITRIFICATION IN ESTUARIES

(U) Divito*, Kate R., S. Travis, and G. P. Zogg

Biology Department, University of New England, Biddeford, ME

DO *SPARTINA ALTERNIFORA* CLONES VARY IN THEIR TOLERANCE TO SEA LEVEL RISE?

(G) Ellis*, Lauren, R. Rochette and H. Hunt

Department of Biology, University of New Brunswick, Saint John, NB

A SURVEY OF BENTHIC, ROCKY-BOTTOM, BIODIVERSITY IN THE SOUTHWEST BAY OF FUNDY: TESTING THE EFFECTS OF BACKGROUND SUBSTRATE ON RECRUITMENT TO A MONITORING TOOL

Evans, Tay E.
Massachusetts Division of Marine Fisheries, Gloucester, MA
MASSACHUSETTS DIVISION OF MARINE FISHERIES EELGRASS RESTORATION
PROJECTS IN BOSTON HARBOR AND SALEM SOUND

Garbary, David
Department of Biology, St. Francis Xavier University, Antigonish, NS
HALOCLADIUS VARIABILIS AN ABUNDANT MARINE INSECT SYMBIOTIC WITH
SEAWEEDES ON ROCKY INTERTIDAL SHORES OF ATLANTIC CANADA

(G) Canary*, Lisa¹, A. Locke², J. Watmough¹, J. Chassé², and D. Bourque²
¹Department of Biology, University of New Brunswick, Fredericton, NB
²Fisheries and Oceans Canada, Gulf Fisheries Centre, Moncton, NB
MATRIX MODEL OF TUNICATE POPULATION SPREAD IN A DISCRETE PATCHY
ENVIRONMENT (HILLSBOROUGH BAY, PEI)

(G) Kras*, Lauren A. and G. E. Moore
Department of Biological Sciences, University of New Hampshire, Durham, NH
THE STATUS OF 5 NEW HAMPSHIRE STATE-LISTED TIDAL MARSH PLANTS

Mackenzie*, Amanda^{1,2} and R. Aiken²
¹Fisheries and Oceans Canada, Bedford Institute of Oceanography, Dartmouth, NS
²Department of Biology, Mount Allison University, Sackville, NB
EXAMINING ENCOUNTER RATES OF THE NUDIBRANCH, *ONCHIDORIS*
BILAMELLATA (L.) IN RELATION TO MOSIMANN RANDOM MOTION AND SEARCH
THEORY MODELS

Millar, Colin
Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA
TRENDS IN TOTAL DISSOLVED NITROGEN CONCENTRATIONS AND LAND USE IN
THE IPSWICH AND PARKER RIVER WATERSHEDS

(G) Mitchell*, Elizabeth E.¹, A. O. Pearson¹, and K. A. Wilson²
Univ. of Southern Maine: ¹Dept of Biology; ²Dept. of Environmental Science and Policy
CURRENT RESEARCH IN THE MARSH RIVER SYSTEM

(G) Mora*, Jordan W. and D. M. Burdick
Jackson Estuarine Laboratory, University of New Hampshire, Durham, NH
HUMAN MODIFICATION OF PHYSICAL GRADIENTS IN NEW ENGLAND TIDAL
MARSHEs

Morgan*, Pamela A., C. B. Feurt, A. Carlson, and D. L. Sargent
Department of Environmental Studies, University of New England, Biddeford, ME
SUSTAINING QUALITY OF PLACE IN THE SACO RIVER ESTUARY THROUGH
COMMUNITY BASED ECOSYSTEM MANAGEMENT

Prosser, Rebecca L.

Ecosystems Center, Marine Biological Laboratory, Woods Hole, MA
ESTIMATING ELEVATION CHANGE AND ACCRETION RATES FROM SURFACE
ELEVATION TABLES AND MARKER HORIZONS AT PLUM ISLAND ESTUARY

Redden, Anna

Acadia Centre for Estuarine Research, Acadia University, Wolfville, NS
TIDAL POWER AND THE CHALLENGES FACED IN CONDUCTING ENVIRONMENTAL
EFFECTS MONITORING AND RESEARCH

(U) Shatilla*, Nadine J.¹ and G. L. Chmura²

McGill University, QC: ¹Earth System Science Program

²Department of Geography and Global Environmental and Climate Change Centre

CAN WE ASSUME A CONSTANT RELATIONSHIP BETWEEN MASS AND VOLUME OF
ORGANIC MATTER IN TIDAL SALT MARSH SOIL?

(G) Sigurdsson*, Gudjon and R. Rochette

Department of Biology, University of New Brunswick, Saint John, NB
SETTLEMENT OF THE AMERICAN LOBSTER *HOMARUS AMERICANUS*: LARVAL
BEHAVIOUR, ABIOTIC INFLUENCES AND IMPORTANCE TO DEMOGRAPHY

(U) Stanton*, Jake, P. Vong, R. Dicker, and J. L. Urban-Rich

Environmental, Earth and Ocean Sciences, University of Massachusetts Boston, Boston, MA
SEASONAL CHANGES IN ZOOPLANKTON DISTRIBUTION IN DORCHESTER BAY
WITH REGARDS TO THE NEPONSET RIVER IN-FLOW

Tedford*, Edmund¹, J. Carpenter¹, R. Pawlowicz², R. Pieters², and G. Lawrence¹

Univ. of British Columbia, Vancouver, BC: ¹Dept. of Civil Engineering; ²Dept. of Earth and
Ocean Sciences

SEASONAL AND TIDAL VARIABILITY OF STRATIFICATION AND MIXING IN THE
FRASER RIVER ESTUARY

Urban-Rich*, Juanita and A. Papastathopoulos

Environmental, Earth and Ocean Sciences, University of Massachusetts Boston, Boston, MA
IN SITU DETECTION OF ZOOPLANKTON FLUORESCENCE IN DORCHESTER BAY,
BOSTON HARBOR.

(U) Vong*, Peter, R. Dicker, J. Stanton, and J. Urban-Rich

Environmental, Earth and Ocean Sciences, University of Massachusetts Boston, Boston, MA
LONG-TERM PHYTOPLANKTON AND ZOOPLANKTON DISTRIBUTION IN
DORCHESTER BAY WITH REGARDS TO THE NEPONSET RIVER IN-FLOW

(U) Wilson*, Brent and R. Rochette

¹Department of Biology, University of New Brunswick, Saint John, NB

INTERACTION BETWEEN THE EUROPEAN GREEN CRAB, *CARCINUS MAENAS*, AND
TWO INTERTIDAL SNAILS, *LITTORINA OBTUSATA* AND *L. LITTOREA*: A TEST OF THE
ARMS-RACE HYPOTHESIS