FRESHWATER MOLLUSK CONSERVATION SOCIETY'S 2014 WORKSHOP <u>MUSSEL STUDIES AND REGULATORY PROCESS ASSOCIATED WITH DAM REMOVALS</u> APRIL 24-25 IN PORTLAND, MAINE

CONTRIBUTED POSTER (CP) SESSION

<u>CP-01</u>: THE EFFECTS OF CRANBERRY BOG RESTORATION ON PHYSICAL HABITAT, AQUATIC INVERTEBRATE COMMUNITIES, AND ECOSYSTEM PROCESSES AT TIDMARSH FARMS, PLYMOUTH, MASSACHUSETTS, <u>Edgar M.</u> <u>Franck¹</u>, Alex Hackman², and Alan D. Christian^{1,3}. ¹School for the Environment, University of Massachusetts Boston, Boston, Massachusetts, ²Division of Ecological Restoration, Massachusetts Division of Fish and Game, Boston, Massachusetts, ³Biology Department, University of Massachusetts Boston, Boston, Massachusetts.

<u>CP-02</u>: PHYSICAL, CHEMICAL, AND BIOLOGICAL INVESTIGATION OF THE EFFECTS OF ACTIVE AND PASSIVE RESTORATION OF CRANBERRY BOG AGRICULTURE IN THE NORTHEASTERN COASTAL ZONE OF MASSACHUSETTS, <u>Sean T. McCanty</u> and Alan D. Christian. Biology Department, University of Massachusetts Boston, Boston, MA 02125.

<u>CP-03</u>: EFFECTS OF LOWHEAD DAMS ON FISH ASSEMBLAGES IN THE NEOSHO RIVER, WITH EMPHASIS ON THE NEOSHO MADTOM, *NOTURUS PLACIDUS*, A FEDERALLY LISTED THREATENED SPECIES. Jeremy Tiemann^{1A}, David Gillette^{1B}, Mark Wildhaber², and David Edds¹. ¹Department of Biological Sciences, Emporia State University, Emporia, KS 66801; ²Columbia Environmental Research Center, United States Geological Survey, Columbia, MO 65201; ^APresent address: Illinois Natural History Survey, Prairie Research Institute at the University of Illinois, Champaign, IL 61820; ^BPresent address: Department of Environmental Studies, University of North Carolina - Ashville, Ashville, NC 28804.

<u>CP-04</u>: THE ROLE OF STAKEHOLDERS IN THE PROTECTION OF FRESHWATER MUSSELS AT HYDROPOWER FACILITIES REGULATED BY THE FEDERAL ENERGY REGULATORY COMMISSION, <u>Brandi M. Sangunett</u>, Federal Energy Regulatory Commission, Division of Hydropower Licensing, Washington, DC 20426.

FRESHWATER MOLLUSK EVOLUTION

<u>CP-05</u>: MOLECULAR PHYLOGENETICS AND MORPHOLOGICAL VARIATION REVEAL RECENT SPECIATION IN FRESHWATER MUSSELS (BIVALVIA: UNIONIDAE: ARCIDENS & ARKANSIA), Kentaro Inoue¹, Alyssa L. McQueen², John L. Harris³, David J. Berg². ¹Department of Biology, Miami University, Oxford, OH 45056; ²Department of Biology, Miami University, Hamilton, OH 45011; ³Department of Biological Sciences, Arkansas State University, State University, AR 72467. <u>CP-06</u>: PHYLOGENY OF THE CRITICALLY ENDANGERED NORTH AMERICAN SPINYMUSSELS, <u>Michael Perkins¹</u>, Michael Gangloff¹, Nathan Johnson². ¹Appalachian State University, 572 Rivers St. Boone, NC 28608. ²Unites States Geological Survey, 7920 NW 71st St. Gainesville, FL 32653

FRESHWATER MOLLUSK LIFE-HISTORY STRATEGIES

<u>CP-07</u>: SPERM AND SEX DETERMINATION IN UNIONIDAE. <u>Amy Maynard</u>, Chris Barnhart, and Laszlo Kovacs. Department of Biology, Missouri State University, Springfield, MO, 65897.

FRESHWATER MOLLUSK POPULATION ECOLOGY

<u>CP-08</u>: RECRUITMENT OF POST-PARASITIC JUVENILE MUSSELS IN AN EAST TEXAS RIVER, <u>David Bakken</u>. Department of Biology, University of Texas at Tyler, 3900 University Boulevard, Tyler, Texas 75799.

<u>CP-09</u>: COULD SCARCITY OF HICKORYNUT MUSSELS IN A REGULATED RIVER BE EXPLAINED BY DECLINE OF THEIR SUITABLE HOST FISH?, André L. Martel¹, and Jacqueline B. Madill¹. ¹Research and Collections (Zoology), Canadian Museum of Nature, Ottawa, ON, Canada, K1P 6P4.

<u>CP-10</u>: PATTERNS IN RECRUITMENT OF FRESHWATER MUSSELS AS A FUNCTION OF RIVER DISCHARGE, Teresa Newton¹, Patricia Ries^{1,2}, Steve Zigler¹, and Roger Haro². ¹U.S. Geological Survey, Upper Midwest Environmental Sciences Center, La Crosse, WI 54602; ²River Studies Center, University of Wisconsin-La Crosse, La Crosse, WI 54601.

<u>CP-11</u>: THE DECLINE OF THE FEDERALLY ENDANGERED PLEUROBEMA CLAVA (CLUBSHELL) IN PYMATUNING CREEK, ASHTABULA COUNTY, OHIO: A TWENTY YEAR STUDY, <u>Ryan J. Schwegman</u> and Martin K. Huehner, EnviroScience, Inc., Stow, OH 44224.

<u>CP-12</u>: LIFE HISTORY AND POPULATION GENETICS OF THE FRESHWATER PEARL MUSSEL, *MARGARITIFERA MARGARITIFERA*, IN THE EAST BRANCH OF THE SWIFT RIVER, MA, <u>Audrey Seiz¹</u>, John Baker², and Jürgen Geist³. ^{1,2}Department of Biology, Clark University, Worcester, MA 01610. ³Aquatic Systems Biology Unit, Department of Ecology and Ecosystem Management, Center of Life and Food Sciences Weihenstephan, Technische Universität München, D-85354 Freising, Germany.

FRESHWATER MOLLUSK COMMUNITY ECOLOGY

<u>CP-13</u>: COMMUNITY ASSEMBLAGE QUANTIFICATION AND DETECTION OF THE FEDERALLY ENDANGERED SNUFFBOX (*EPIOBLASMA TRIQUETRA*) BELOW A LOW-HEAD DAM IN LYONS, MI, <u>Shaughn Barnett</u>¹ and Daelyn Woolnough^{1,2}. ¹Biology Department, Central Michigan University, Mount Pleasant, Michigan USA. 48859. ²Institute for Great Lakes Research, Central Michigan University, Mount Pleasant, Michigan USA. 48859.

<u>CP-14</u>: QUANTITATIVE HABITAT ASSESSMENT OF MUSSEL COMMUNITIES IN THE LOWER POMME DE TERRE AND SAC RIVERS, Bryce Maynard¹, Jason Persinger¹, Zach Ford¹, Stephen McMurray². ¹Missouri Department of Conservation, Clinton, MO 64735. ²Missouri Department of Conservation, Resource Science Center, Columbia, MO 65201.

FRESHWATER MOLLUSK LANDSCAPE ECOLOGY

<u>CP-15</u>: ARE DECLINING WATER PHYSICOCHEMICAL PARAMETERS AND FOREST DESTRUCTION RESPONSIBLE FOR RANGE WIDE DECLINES IN APPALACHIAN ELKTOE (*ALASMIDONTA RAVENELIANA*) POPULATIONS? <u>Gary</u> Pandolfi and Michael M. Gangloff. Biology Department, 572 Rivers Street, Appalachian State University, Boone, NC 28608-2027.

FRESHWATER MOLLUSK FOOD WEB AND ECOSYSTEM ECOLOGY

<u>CP-16</u>: A COMPARISON OF FILTER FEEDING AND DEPOSIT FEEDING IN THE INVASIVE ASIAN CLAM, CORBICULA FLUMINEA, AND THE FATMUCKET, LAMPSILIS SILIQUOIDEA. Caitlin Wilhelm and Chris Barnhart. Department of Biology, Missouri State University, Springfield, MO 65897.

FRESHWATER MOLLUSK CONSERVATION DIRECTIONS

<u>CP-17</u>: 15 YEARS UNDERWATER – DOCUMENTING THE DIVERSITY AND STATUS OF FRESHWATER MUSSELS IN MINNESOTA. <u>Bernard E. Sietman</u>¹, Mike Davis², and Nicole Ward¹. ¹Minnestoa Department of Natural Resources, 500 Lafayette Rd., St. Paul, MN 55155, bernard.sietman@state.mn.us, nicole.ward@state.mn.us; ²Minnestoa Department of Natural Resources, 1801 South Oak St, Lake City, MN 55041, mike.davis@state.mn.us. <u>CP-18</u>: STRATEGIC HABITAT CONSERVATION FOR DWARF WEDGEMUSSEL IN NC: APPLYING A STRUCTURED DECISION MAKING FRAMEWORK TO LEAD TO THE RECOVERY OF ONE OF NORTH CAROLINA'S RAREST FRESHWATER MUSSEL SPECIES, <u>Sarah McRae</u>¹, David Smith², Tom Augspurger¹, Judith Ratcliffe³, Art Bogan⁴, Rob Nichols⁵, Chris Eads⁶, Tim Savidge⁷. ¹USFWS, Raleigh, NC 27636; ²USGS, Kearneysville, WV 25430; ³NC Natural Heritage Program, Raleigh, NC 27601; ⁴NC Museum of Natural Science, Raleigh, NC 27601; ⁵NC Wildlife Resources Commission, Raleigh, NC 27606; ⁶NC State University Aquatic Epidemiology Conservation Laboratory, Raleigh, NC 27606; ⁷The Catena Group, Hillsborough, NC 27278.

<u>CP-19</u>: AN EFFICIENT SAMPLING TECHNIQUE FOR COLLECTING MUSSEL DENSITY AND DITRIBUTION DATA, <u>Steve Johnson¹</u> and <u>Sean Werle¹</u>. New England Environmental, Inc. 15 Research Drive, Amherst, MA 01002.

<u>CP-20</u>: FRESHWATER MUSSEL COLLECTION AND RELOCATION ALONG THE CHIPOLA RIVER IN THE FLORIDA PANHANDLE, Jason Dickey¹, Mathew Leonard². Cardno ENTRIX, 10 Colvin Avenue, Ste 101, Albany, NY 12209, ²Stantec Consulting, 615 Crescent Executive Court, Ste 248, Lake Mary, FL 32746.

<u>**CP-21</u>: HOW RELOCATION AFFECTS FRESHWATER MUSSEL METABOLISM**, <u>Ieva</u> <u>Roznere¹</u>, G. Thomas Watters¹, Barbara A. Wolfe², and Marymegan Daly¹. ¹Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, Columbus, OH 43210; ²Department of Veterinary Preventive Medicine, The Ohio State University, Columbus, OH 43210.</u>