FIRST CALL FOR ABSTRACTS for

FMCS 2021 VIRTUAL SYMPOSIUM
April 12-14, 2021

Due in large part to the uncertainty of future management of COVID-19 by next Spring 2021, the 12th Biennial Symposium of the Freshwater Mollusk Conservation Society will be held VIRTUALLY, with a mixture of live and web posted events, following the theme titled:

Back to the Future: The Virtual Unknown

A plenary session will open the virtual meeting and provide a more traditional gathering place. Prerecorded presentations will be organized by topic and made available for viewing via website embedded YouTube videos and JPEG poster images at any time during the symposium. Presenters have three options for sharing their work with attendees:

1. A 12-minute traditional oral presentation,
2. A 5-minute "lightning talk" presentation, sharing information on early results or quick project updates, and
3. A poster presentation, consisting of a JPEG image along with a 3-minute pre-recorded video message

There also will be opportunities for questions and answers in a chat forum. Traditional topics for past presentations have included: Life History & Ecology, Status and Distribution of Mollusks, Surveys and Monitoring, Propagation, Ecosystems and Community Ecology, Genetics and Phylogeny, Ecosystem Services, Habitat and Mollusk Community Restoration, Contaminants and Ecotoxicology, Outreach, Climate Change, and Mollusk Kills. In addition, we are welcoming video field trips, tours, and fun "virtual" social activities (e.g., beer making, music, mentoring advice, etc.). We welcome creativity to keep people engaged!

INSTRUCTIONS FOR AUTHORS

Abstracts will be due by 11:59 pm Eastern U.S. on **February 1, 2021**.
Pre-recorded contributed oral and poster presentations will be due by 11:59 pm Eastern U.S. on Sunday **March 28th, 2021** (guidance on recording and uploading presentations will be posted soon on the FMCS website).

Submittal format: Abstracts should be submitted as an email attachment in Microsoft Word® or Rich Text format to Patricia Morrison at pearlymussel@gmail.com.
File name should include presenter's last name and initials (e.g., jonesjm.doc). Acknowledgment of abstract receipt, if requested, will be provided by e-mail.
Abstract format: The abstract should contain the title in **BOLD**, **CAPITAL** letters, followed by the author(s), and address(es). Underscore the presenter's name. Skip one line and begin the text including a clear summary of presentation (e.g., objectives, results, and conclusions.) Please keep abstracts to 300 words or less (see example below):

DROUGHT-INDUCED MASS MORTALITY OF FRESHWATER MUSSELS ALTERS ECOSYSTEM FUNCTION: A MESOCOSM EXPERIMENT. Traci P Dubose[1], Carla L Atkinson[2], Caryn C Vaughn[1] & Stephen W Golladay[3]**.** [1]University of Oklahoma, Norman, OK; [2]University of Alabama, Tuscaloosa, AL; [3]Jones Center at Ichauway, Newton, GA.

Droughts are becoming more frequent and intense globally. As sedentary organisms, native freshwater mussels are vulnerable to the high water temperatures and shrinking aquatic habitat caused by these extreme events. While drought-driven die offs have been documented in the southern Great Plains, the ecosystem impacts of these droughts have not been completely quantified. To better quantify impacts of mussel mass mortality events on ecological function, we conducted a mesocosm experiment that simulated a mussel die-off. We created three scenarios in eighteen 946L mesocosms: nine control mesocosms without freshwater mussels, four mesocosms with a live mussel community, and five mesocosms with a mussel community that experienced a die-off. We measured water column nutrients, primary production, and the macroinvertebrate community before (3 samples over 20 days) and after (4 samples over 39 days) the mussel mortality event. We also measured mussel decomposition following the die-off. In the week after the die-off, ammonium increased by 94% in the mortality mesocosms and was significantly higher than the control mesocosms, but not the live mesocosms. Soluble reactive phosphorus increased in mortality mesocosms but was not significantly different than the control or live mesocosms. The rapid nutrient release following mussel mortality likely stimulates both the autotrophic and heterotrophic components of river food webs. Benthic gross primary production was greater in mortality and live mesocosms than in control mesocosms. Decomposition of organic matter increased immediately following mussel death in mortality mesocosms and was statistically different than live mesocosms. We combined our mesocosm experiment results with field observations and the literature to build a conceptual model of how unionid mass mortality events likely impact ecosystem function across short and long time scales. This conceptual model should aid development of conservation and management strategies that sustain stream structure and function in the face of drought-driven mussel losses.

Presentation Format: Oral presentation (specify 12-minute traditional or 5-minute "lightning") or Poster with 3-Minute Message?
Student: Yes/No *?

*Note: All students submitting abstracts, provided they meet eligibility requirements, will be judged for the best student oral or poster presentation, unless otherwise indicated.