

# ***Dreissena* Early Detection Best Practices Technical Workshop Schedule**

Revised 2/6/2012

## **Tuesday 7 Feb 2012**

8:00 Gathering, sign in  
*(coffee and breakfast available in the 1873 café and Market Square Cafeteria)*

8:30 Plenary Session in The Chambers  
Meeting Opening — Marc Frischer  
Housekeeping issues — Mike Misamore, Texas Christian University  
QZAP program sponsor — David Britton, U.S. Fish & Wildlife Service

9:00 Meeting Agenda & Goal Setting — Marc Frischer, Skidaway Institute of Oceanography)

### *Expert Methods Presentations*

9:30 Cross Polarized Light Microscopy – Steven Wells, Portland State University  
*Using light microscopy and shell morphology to identify planktonic freshwater mussel larvae in early detection monitoring efforts for zebra and quagga mussels*  
Presentation & Discussion

10:30 Imaging Flow Cytometry – Erin Murchie-Janicki, National Park Service  
*Use of imaging flow cytometry (FlowCAM) for the detection of Dreissena larvae in plankton samples*  
Presentation & Discussion

11:30 Break

12:00 Molecular-Based Methods (PCR) – John Darling, Environmental Protection Agency  
*DNA-based detection methods in principle and practice*  
Presentation & Discussion

1:00 Lunch (*Market Square Cafeteria*)

### *Recent Technological Advances*

2:00 Imaging Flow Cytometry – Scott O'Meara, U.S. Bureau of Reclamation  
*Advancements in imaging flow cytometry (FlowCAM®) larval mussel detection technology and methodology*

2:30 PCR – John Wood, Pisces Molecular LLC  
*A combined ZM & QM qPCR assay and absolute quantification with a plasmid positive control*

3:00 Initial charge for Breakout groups – Recommendation for best practices

- 3:15 Break out group discussions  
I. Cross Polarized Light Microscopy – Zeidman Conference Room  
II. Image Flow Analysis – Acuff Conference Room  
III. Molecular – The Chambers

*Develop specific methodological best practices recommendations*

4:00 Adjourn

**Wed 8 Feb 2012**

8:00 Gathering, sign in  
*(coffee and breakfast available in the 1873 café and Market Square Cafeteria)*

8:30 Plenary Session in The Chambers  
Recap of Tue and Charge for the Day – Marc Frischer, Skidaway Institute of Oceanography

*Methods vs. Results – An examination of two recent data sets*

9:00 2010 Round Robin Study – Marc Frischer, Skidaway Institute of Oceanography  
Presentation & Discussion

10:00 Lake Texoma Data Set – Christopher Churchill, U.S. Geological Survey  
*USGS zebra mussel monitoring program for North Texas - Preliminary veliger data*  
Presentation & Discussion

11:00 Charge for Breakout discussion and continue breakout group discussions  
I. Cross-Polarized Light Microscopy – Hillel Conference Room  
II. Image Flow Analysis – Acuff Conference Room  
III. Molecular – The Chambers

*Complete discussion of best practices method recommendations and review general recommendation from Frischer et al. (2010) Round Robin Study report and expand from there.*

1:00 Lunch (*Market Square Cafeteria*)

2:00 Plenary Session in The Chambers  
*Unveiling the QZAP pilot testing program - Sandra Nierzwicki-Bauer, Darrin Fresh Water Institute and Marc Frischer, Skidaway Institute of Oceanography*

2:30 Discussion  
*Presentation of breakout group discussions*  
*Attempt to reach consensus of recommendations*

4:00 Adjourn First Workshop