



Tuesday, March 26, 2024
AGENDA

12:00 – **SFS Certification Testing**
18:00 (Morgan Room)

Mark Brickner / PADEP
mbrickner@pa.gov

19:00 – **On-site Registration**
20:00 (Hallway by Washington & Fairfax Rooms)

Wednesday, March 27, 2024

AGENDA

(Washington & Fairfax Rooms)

- 7:30 – **On-site Registration**
8:30 **Continental Breakfast**
(Hallway by Washington & Fairfax Rooms)
- 8:30 – **Welcome, AMAAB Business & Announcements** Rick Browder / AMAAB President;
8:40 VADEQ
richard.browder@deq.virginia.gov
- 8:40 – **Keynote Address: Changing Perspectives** Larry Willis / VADEQ (ret.)
9:10 ldwillis1028@gmail.com
- 9:10 – **Exploring the Hidden Diversity of Winter-emerging** Tessa Durnin / Normandeu
9:30 **Chironomidae (Insecta: Diptera)** Associates, Inc.
tdurnin@normandeu.com
- 9:30 – **Thermal and Biological Effects of a Headwater Pond in** Zach Kelly / USGS EESC
9:50 **Maryland: Opportunities for Trout Habitat Restoration**
zkelly@usgs.gov
- 9:50 – **Projecting the Distribution of Aquatic Species of Greatest** Brent Murry / WVU
10:00 **Conservation Need Throughout the Mid-Atlantic**
(SPEED TALK)
brent.murry@mail.wvu.edu
- 10:00 – **Can Freshwater Mussels Function as a Best Management** Brendan Foster / USGS VA & WV
10:10 **Practice to Provide Water-quality Benefits in Urban Streams?** Water Science Center
(SPEED TALK)
bfoster@usgs.gov
- 10:10 – **Collaboration Between State/federal Agencies & a 501c3** Doug Wood / WVDEP (ret.)/WVDNR/
10:20 **Trail Club to Make Trail Improvements That Enhance Habitat** WV Scenic Trails
for the Endangered Candy Darter (*Etheostoma osburni*) in
WV (SPEED TALK) chingwe1755@gmail.com
- 10:20 – **BREAK**
10:40 **Posters (Morgan Room)**
- 10:40 – **An Investigation of the Drivers of Harmful Algal Blooms** Carly Maas / USGS
11:00 **(HABs) in Virginia**
cmaas@usgs.gov
- 11:00 – **Nuisance Filamentous Algal Quantification in Virginia's** Ted Turner / VADEQ
11:20 **Shenandoah River System**
robert.turner@deq.virginia.gov
- 11:20 – **Trends in Brook Trout Abundance Over 3 Decades in** Than Hitt / USGS EESC
11:30 **Shenandoah National Park (SPEED TALK)**
nhitt@usgs.gov

11:30 – 11:50	Biological Response to Stream Restoration	Mark Southerland / Tetra Tech mark.southerland@tetratech.com
11:50 – 12:00	ChesBay 24k: A Workflow for Summarizing Landscape Data in the Chesapeake Bay Watershed and Beyond to the 1:24k Scale (SPEED TALK)	Benjamin P. Gressler / USGS EESC bgressler@usgs.gov
12:00 – 13:30	LUNCH (on your own)	
12:45 – 13:30	POSTER SESSION (Morgan Room)	
13:30 – 13:50	Catch the Mystery, Catch the Drift: Macroinvertebrate Drift Through a Piped Headwater Stream	Greg Pond / USEPA pond.greg@epa.gov
13:50 – 14:00	Analysis of Trends in Fish and Macroinvertebrate Assemblage Metrics Across the Chesapeake Bay Watershed Reveals Spatial and Temporal Data Gaps (SPEED TALK)	Lindsey Boyle / USGS EESC lboyle@usgs.gov
14:00 – 14:20	Monitoring Brown Trout Invasion into a Native Brook Trout Stream Following Acid Mine Drainage Remediation	Brianna Hutchison / SRBC bhutchison@srbc.gov
14:20 – 14:40	Evaluating Stream Restoration Effectiveness: Water Quality and Biology at UT Sassafras	Ally Bartell / MDNR Resource Assessment Service allyson.bartell@maryland.gov
14:40 – 14:50	Ecological Flow Vulnerability Assessments Across Large Landscapes (SPEED TALK)	Taylor Woods / USGS EESC tewoods@usgs.gov
14:50 – 15:10	BREAK Posters (Morgan Room)	
15:10 – 15:30	A Season of Change: Springtime Sampling in Virginia and the Accumulation of Degree Days	Mike Shaver / VADEQ michael.shaver@deq.virginia.gov
15:30 – 15:40	Certifying Proficiency in Taxonomic Identification of Fishes (SPEED TALK)	Lou Reynolds / USEPA Region 3 Field Services Branch reynolds.louis@epa.gov
15:40 – 16:00	PFAS Data Management at Virginia DEQ: A Programmatic Approach to Wrangling Complex Datasets	Joseph Famularo / VADEQ joseph.famularo@deq.virginia.gov
16:00 – 16:20	Causal Inference Approaches Reveal Both Positive and Negative Effects of Management Practices on Instream Conditions	Sean Emmons / USGS semmons@usgs.gov

16:20 – **Using Water Quality Data to Aid in Developing Natural Area** Doug Wood / WVDEP (ret.)/WVDNR/
16:30 **Management Plans in WV State Parks** WV Scenic Trails
(SPEED TALK) chingwe1755@gmail.com

16:30 – **AMAAB Announcements, Business Elections, Raffles** Rick Browder / AMAAB President
adjourn richard.browder@deq.virginia.gov
Mike Selckmann / AMAAB VP
gmselckmann@icprb.org

BREAK

18:00 **Historical Demonstration – Conflict Without, Conflict Within:** Doug Wood / WVDEP (ret.)/WVDNR/
Thomas Ingles, A Man of Two Cultures in Dunmore's War WV Scenic Trails
chingwe1755@gmail.com

19:00 – **EVENING GROUP SOCIAL** (Washington & Fairfax Rooms)
22:00

POSTERS (Morgan Room)

May be viewed Wednesday during breaks and over lunch (12:45 – 13:30)

Multi-resolution Nested Models Show Hierarchical Nature of Environmental Variable on Species Distribution

Alexander H Kiser / USGS
akiser@usgs.gov

Introducing TroutSpotter: A New Tool for Anglers and Agencies to Identify Individual Fish with AI

Karli Rogers / USGS EESC
kmrogers@usgs.gov

What Fish Mucus Tells Us About the Chemical Identity of Endangered Fish and their Potential Exposure to Contaminants

Daniel Deeds / USGS
ddeeds@usgs.gov

Can Nitrifying Bacteria Improve Freshwater Mussel Propagation?

Katherine Philipp / MDDNR
katherine.philipp@maryland.gov

Surface and Porewater Ammonia Concentrations in Relation to Dwarf Wedgemussel (*Alasmidonta Heterodon*) Population Status in Maryland, U.S.A

Matt Ashton / MDDNR
matthew.ashton@maryland.gov

Integrated Monitoring Programs to Help Understand and Forecast Toxigenic Algal Blooms in Lake Anna and the Upper Shenandoah River Basin, Virginia, U.S.A.

Doug Chambers / USGS
dbchambe@usgs.gov

Water Quality Trends Using Astronomical Seasonal Blocks

Roger Stewart / VADEQ
roger.stewart@deq.virginia.gov

Seasonal Variability of Benthic Macroinvertebrate Assemblages in Urban Landscapes

Chris Ruck / Fairfax County,
Watershed Assessment
Christopher.ruck@fairfaxcounty.gov

Thursday, March 28, 2024 WORKSHOPS

- 7:00 – 8:00 **Continental Breakfast**
(Hallway by Washington & Fairfax Rooms)
- 8:00 – 12:00 **A Thermal Fish Index; Concepts, Development, and Implementation**
(Rumsey Room)
- The thermal fish index (TFI) is a valuable tool for monitoring and assessing fish communities. The TFI is a multidisciplinary metric that can easily be applied to studies relating to: anthropogenic stress, waterbody condition, thermal effluents (316a), and global climate change. This simple, yet effective, metric can easily be incorporated in any program that uses assemblage-based methods for fish collection, or anyone working with fish assemblage data. An additional benefit includes a meaningful characterization of thermal class allowing the TFI to be easily understood and communicated across watershed, ecoregion, or jurisdictional boundaries. This presentation will introduce the development of the TFI metric into an assessment method for making 303(d) and 305(b) listings in Pennsylvania and discuss real-world examples.
- Tim Wertz / PADEP
twertz@pa.gov
Matt Shank / PADEP
mattheshan@pa.gov
- 8:00 – 12:00 **PFAS and Sampling for Aquatic Biologists**
(Washington / Fairfax Room)
- Joe Duris and Emily Woodward from USGS will present on sampling PFAS, Carla Ng from University of Pittsburgh will present on bioaccumulation of PFAS, and Amy Williams will discuss PA DEP's passive sampling of PFAS. This workshop will be a practical discussion on how to sample for PFAS and how species bioaccumulate PFAS. This workshop will be tailored towards the aquatic biologist with practical applications for freshwater sampling.
- Amy Bergdale / USEPA
bergdale.amy@epa.gov
Joe Duris / USGS
jwduris@usgs.gov
- 8:00 – 12:00 **Invasive Aquatic Plants *Limit: 20 Participants***
(Old Inn)
- Participants will learn the basics of aquatic plant identification, best management practices for nuisance species, data collection, and reporting tools in aquatic plant management. Individuals partaking in the workshop will receive hands-on identification experience with live plant samples and utilizing taxonomic appropriate keys. The workshop will explore a variety of SAV (Submersed Aquatic Vegetation) survey techniques through recent case studies and participants will be immersed in aquatic field experiences (pending suitable weather conditions and as time allows). Participants will receive (via email) a Northeast Aquatic Plant Identification Guide as part of the workshop and are welcome to bring their own magnifying glasses, tweezers, field boots, and weed rakes.
- Emily Mayer / NJDEP
emily.mayer@dep.nj.gov

- 8:00 – 12:00 **Freshwater Mussel Ecology and Taxonomic Introduction (Order: Unionida) *Limit: 20 Participants***
(Downstairs Social Room) Kevin Eliason / WVDNR
kevin.m.eliason@wv.gov
- A look into the ecology and life histories of freshwater mussels. We will take a look into the current state of mussels, population trends, threats faced by freshwater mussels, and what is being done to alleviate those threats. While proficiency in mussel identification cannot be had during a short time, the workshop will cover the anatomy and identifiable features of mussels and have practical examples (provided) to observe and practice identification. The class and example collections will be WV-centric, however, the information and many of the specimens overlap regionally.
- 8:00 – 12:00 **Conservation, Ecology and Identification of Mid-Atlantic Crayfishes *Limit: 20 Participants***
(Panhandle) Zack Graham, PhD / West Liberty University
zackary.graham@westliberty.edu
- There are more than 350 species of crayfish in North America with around ½ currently threatened with population decline or extinction. This workshop will review crayfish biology, distribution, and ecology specific to the Mid-Atlantic region. Focus will be placed on the major anatomical characteristics used to differentiate crayfish species and key concepts associated with their taxonomy. Special attention will be made to learn how to differentiate between non-native and native species and discuss the history and potential future for crayfishes in the Mid-Atlantic region. Identification keys will be provided and attendees will have the opportunity to key out live and preserved specimens of regional crayfish species.
- 8:00 – 12:00 **Salamander Taxonomy/ID Workshop *Limit: 25 Participants***
(Morgan Room) Matt Neff / Calvert Marine Museum; Virginia Herpetological Society,
matthew.neff@calvertcountymd.gov
- This workshop will commence with a short lecture on the general biology of salamanders. This will be followed by an introduction to the common salamander families of the North/Central Appalachians with a focus on ones that utilize bodies of water such as streams and vernal pools (some woodland salamanders will be included as well). While some species of salamanders are easy to identify, members of some genera can be more challenging. The workshop will provide participants with the opportunity to learn some of the key differentiating features between some of the trickier species. In addition to examining the key characteristics for species identification in the field, this workshop will include a review of salamander ecology, distribution, natural history, and conservation issues. If weather allows, some live specimens will be provided to examine.