

SCHEDULE-AT-A-GLANCE

#PATroutintheClassroom

3rd Biennial PA TIC Summit



Wednesday | 12 July 2023 | 7:30am - 4:30pm

PaTTAN | 6340 Flank Drive, Harrisburg, PA

7:30am - 9:00am	Registration begins at 7:30am. Exhibits open at 8:00am in:		Conference Room I
9:00am - 9:15am	Welcome! Special address by PA Council of Trout Unlimited (PATU) and PA Fish & Boat Commission (PFBC)		Conference Room I
9:15am - 9:50am	Resources & Programs that enhance PA's Native & Wild Trout Populations Conference Room I		
10:00am-10:50am Concurrent Session 1	<u>Option A</u> Susquehanna Room Fish Health and the Importance of Investigation	<u>Option B</u> Dauphin Room A closer look – PFBC's new mussel and non-game species recovery program	<u>Option C</u> Lancaster Room TIC & MWEES in the New STEELs Standards
11:00am - 11:50pm Concurrent Session 2	<u>Option A</u> Lancaster Room Fish Health and the Importance of Investigation	<u>Option B</u> Lebanon Room A closer look – PFBC's new mussel and non-game species recovery program	<u>Option C</u> Dauphin Room TIC & MWEES in the New STEELs Standards
12:00pm - 1:00pm	LUNCH Keynote Speaker: Trout in the Classroom, A Cornerstone of TU's Community Efforts Franklin Tate, Director of National TU's Headwaters Youth Program		Conference Room I
1:00pm - 2:10pm	TIC, STEM, and more! – Mercyhurst University Networking Sessions		Conference Room I
2:20pm - 3:10pm Concurrent Session 3	<u>Option D</u> Susquehanna Room Enhance TIC with PA State Park's Watershed Education Curriculum	<u>Option E</u> Workshop - 2:20pm-4:10pm Lebanon Room STEMming It Up with TIC	<u>Option F</u> Dauphin Room Inspire Students and Enhance TIC using Stroud Center Resources
3:20pm - 4:10pm Concurrent Session 4	<u>Option D</u> Susquehanna Room Enhance TIC with PA State Park's Watershed Education Curriculum		<u>Option F</u> Lancaster Room Inspire Students and Enhance TIC using Stroud Center Resources
4:20pm – 4:30pm	Summit conclusion - PFBC & PATU		Conference Room I

* PLEASE NOTE: Concurrent sessions run for 50 minutes and repeat in same location during Sessions 1/2 and Sessions 3/4. Participants should attend a NEW concurrent session during each block of time.



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9:15- 9:50: Resources & Programs that enhance PA's Native & Wild Trout

Populations *Nate Walters, PFBC Fisheries Biologist, Coldwater Unit Leader* | **Conference Room 1**

PFBC's Coldwater Unit Leader, Nate Walters, introduces participants to some of the programs that protect, conserve, and enhance both native and wild trout populations in Pennsylvania. Learn more about the "why" behind protecting these trout populations and the importance of discussing with your TIC students.

10:00 - 10:50: Concurrent Session 1

Option A | **Fish Health and Observation Importance**

Coja Yamashita, PFBC Biologist, Fish Health Unit Leader | Susquehanna Room

PFBC's Fish Health Unit Leader, Coja Yamashita, introduces participants to fish health, importance of observation, and record keeping (e.g. *water monitoring, fish behavior* etc). During the presentation participants learn about what to look for, ways to investigate fish health issues, and use fish health as a teaching tool.

Option B | **A closer look – PFBC's new mussel and non-game species recovery program**

Scott Ray, PFBC Species Recovery Biologist II | Dauphin Room

Discover how your classroom TIC experiences connect to strategies PFBC biologists use to raise mussels and non-game species for conservation. Lead biologist on this new PFBC quest, Scott Ray, introduces TIC participants to work with closed circuit systems (aquariums) to breed, raise, and release, important, non-game fish and other species into PA watersheds. Scott's 25 years of fish production and aquarium experience, coupled with his work with non-game species, brings a plethora of knowledge to TIC.

Option C | **TIC & MWEEs in the New STEELS Standards** | *Steve Kerlin, Ph.D., Director of Education Stroud*

Water Research Center | Lancaster Room

This presentation brings together two highly important advancements in education across the Commonwealth of PA - Meaningful Watershed Educational Experiences (MWEEs) and the NEW PA Science, Technology, Engineering, Environmental Literacy, and Sustainability (STEELS). Presenters, who are the primary investigators of the PA Environmental Literacy and MWEE Capacity Building Project, will first share a little bit about the MWEE framework and the new standards to help participants gain awareness. Then they will guide participants through an exploration activity to identify new standards which correspond with Trout in the Classroom (TIC) activities and the MWEE essential elements. Participants will then use the MWEE Think Cloud to begin outlining how they can incorporate TIC & MWEEs and the new standards into their nonformal and formal educational programs and lessons. Lastly, the presenters will share resources, and the structure and functions of the six new PA ELIT Regional Hubs to assist with the implementation of MWEEs and the new standards.

11:00 - 11:50: Concurrent Session 2

12:00pm – 1:00pm Keynote | **TIC, A Cornerstone of TU's Community Efforts**

Franklin Tate, Director of TU's Headwaters Youth Program | Lancaster Room

TIC has been one of the most popular TU-sponsored youth programs for decades. This presentation takes a deeper look at what makes TIC so successful, how it continues to grow, and find new audiences/supporters. Discover what makes TIC work well in communities across the country and how TIC fits into the broader context of TU's Headwaters Youth program.

1:00 - 2:10: Networking Session

1p.m. – 1:20p.m. NW TIC, networking, and STEM | *Dr. Amy Lucinda Burniston, Chair, Department of Education, Mercyhurst University* | Conference Room 2

Session description coming soon.

1:20p.m. – 2:10p.m. Statewide networking session

An opportunity to network, discuss, and provide ideas with teachers and program partners. Participants of the Summit will group into 3 major regions in PA – Central, Eastern, Western. Each region discussion will be facilitated.

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2:20 – 4:10: Workshop Block

Option E | STEMming It Up with TIC Rachel Cahill, STEM and Makerspace Coordinator, Grant Writer, Penn Mont Academy| Cambria Room

Stemming it up with Trout in the Classroom brings innovation and design to the forefront. Teaching Problem-Solving skills, technical skills, and letting students use their creativity. Showcasing goals and not the pathway to achievement allows, for students even to shock YOU. In this Session participants get the opportunity to interact with 3D pens, Wood Burners, Engineering Challenges, Science Challenges, and Art Challenges, in Makerspace fashion. You get to choose your pathway for what fits best in your program. We will be hands-on the whole way.

2:20 - 3:10: Concurrent Session 3

Option D | Enhance TIC with PA State Park's Watershed Education Curriculum | Christopher Kemmerer, DCNR Chief, Education and Interpretation Section | Lancaster Room

Discover how to bring TIC to the next level with PA Department of Conservation and Natural Resource's (DCNR) Watershed Education curriculum. This curriculum is interdisciplinary and blends hands-on classroom and field investigations. Students participate in data collection and analysis, community networking and partnerships, stewardship, and service-learning activities.

Option F | Inspire Students and Enhance TIC using Stroud Center Resources | David Kline, Watershed Education Specialist, Stroud Water Research Center | Susquehanna Room

Bring your computer/phone to experience Stroud Water Research Center's free online resources that can help take your TIC program to the next level, at this presentation! During this presentation David will help you explore a stream study simulation (*assess water quality based on physical, biological, and chemical parameters*), a runoff simulation (*demonstrates land-use impacts on hydrology*), and a professional-grade GIS modeling application (*delineates and provides information on watershed health, geographic data, and demonstrates impacts of development and restoration efforts*). He will also guide you through Stroud's website that offers "CLOSE-UP" views of the macroinvertebrates that live in our streams and curricula that enhances learning while also promoting civic engagement.

3:20 - 4:10: Concurrent Session 4

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