

2019 Meeting

North Carolina Chapter of the American Fisheries Society

&

North Carolina Freshwater Mollusk Workgroup

Tuesday, February 19th – Thursday, February 21st, 2019

The Historic Brookstown Inn

200 Brookstown Ave

Winston-Salem, NC

We would like to thank our sponsors of the 30th annual meeting of the North Carolina Chapter of the American Fisheries Society





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and the North Carolina Freshwater Mollusk Workgroup

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Winston-Salem, NC

	PROGRAM AT A GLANCE			
Tuesday 19 February				
1000 - 1700	NC Freshwater Mollusk Workgroup Meeting			
1830 – 2200	Social, Cotton Mill Lounge			
Wednesday 20 Fe	ebruary			
0730 – 1800	Registration Open			
0800 - 1130	NCAFS Workshop – Aquatic Nuisance Species, Grand Ballroom			
1130 - 1300	Lunch (on your own)			
1300 - 1740	NCAFS Meeting Registration			
1300 - 1740	Oral Presentations, Grand Ballroom			
1900 - 2000	Poster Presentations			
1900 – 2200	Social, Dinner, and Student Raffle			
Thursday 21 February				
0830 - 1120	Oral Presentations			
1120 - 1300	Lunch (on your own)			
1300 - 1500	NCAFS Business Meeting			

Tuesday 19 February			
TIME	Brookstown Inn – Grand Ballroom		
1000 - 1700	NC Freshwater Mollusk Workgroup		
1000 0000	Rachael Hoch, NCWRC - Facilitator		
1830 – 2200	Social – Cotton Mill Lounge		
	Wednesday 20 February		
TIME	Brookstown Inn – Grand Ballroom		
0800 - 1130	NCAFS Continuing Education Workshop: Aquatic Nuisance Species		
	Kevin Hining, NCWRC - Introduction		
	Chris Goudreau, NCWRC - North Carolina Aquatic Nuisance Species Plan Bryn Tracy - Nuisance Fish Species		
	Luke Etchison, Thomas Russ, and Dylan Owensby, NCWRC - Nuisance Crayfish and Mollusk		
	Species		
	Erika Haug and Jessica Baumann, NCSU – Nuisance aquatic plants		
1130 - 1300	Lunch (on your own)		
1300 - 1315	Opening remarks – Tyler Black, NCAFS President		
	Session 1: Mussel Ecology and Monitoring		
	Moderator: Andrea Leslie, NCWRC		
1315 – 1335	Did You Look Hard Enough? A Case Study of Mussel Detection Efficiency in A Piedmont		
	River		
	Brena K. Jones, NCWRC		
1335 – 1355	The Relationship Between Mesohabitat Structure and Mussel Communities in East Texas		
	Rivers		
	Andrew D. Chan. MCM/DC		
1355 – 1400	Andrew R. Glen, NCWRC Filling the Gaps: Surveying for Two Mussel Species Under Federal Listing Review		
1333 - 1400	Thing the daps. Surveying for two lousser species onder tederal Listing Neview		
	Katharine DeVilbiss, NCWRC, Lightning Talk		
1400 - 1420	Estimating Appalachian Elktoe, Alasmidonta raveneliana, Abundance and Occupancy in the		
	South Toe River, NC		
	Chantella I. Dandel, ASI I		
1420 – 1440	Chantelle L. Rondel, ASU Monitoring Changes to Interstitial Sediments in the South Toe River Using Freeze Cores		
1420 1440	Worktoring changes to interstitial sediments in the south roe liver osing freeze cores		
	Michael Thompson, ASU		
1440 - 1445	Freshwater Mussel Surveys in the Catawba River System		
	Ryan J. Heise, Duke Energy, Lightning Talk		
	Session 2: Mussel Toxicology and Propagation Moderator: Rachael Hoch, NCWRC		
1445 – 1505	In Situ Evaluation of Freshwater Mussel Sensitivity to Prescribed Algaecide Applications		
	in a North Carolina Piedmont Reservoir		
	Sean B. Buczek NCSU		
1505 – 1510	Preliminary Studies on the In-Vitro Culture of Yellow Lance, Elliptio lanceolata		
	Michael J. Walter, NCSU, Lightning Talk		
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1510 - 1515	Variation in Pollutant-Removal Ecosystem Services of Toxic Heavy Metals by Freshwater Mussels
	Wiussels
	Jennifer M. Archambault, NCSU, Lightning Talk
1515 – 1535	BREAK
	Session 3: Faunal Response to Habitat Modifications
	Moderator: Mike Gangloff, ASU
1535 – 1555	Rocky River Dam Removal: Opportunities, Concerns, and Lessons Learned
	Vann F. Stancil, NCWRC
1555 – 1600	Assessing Aquatic Faunal Response to Dam Removal: Milburnie Dam Removal Species Year 1 Monitoring Review
	Tim Savidge, Three Oaks Engineering, Lightning Talk
1600 - 1605	Culvert Replacement – Applied Genetic Diversity
	Ned Jones, Triangle Fly Fishers, Lightning Talk
1605 – 1625	Movement of Acoustic Tagged Largemouth Bass between Lake Mattamuskeet and
	Surrounding Canals in Relation to Changes in Lake Level
	Kevin J. Dockendorf, NCWRC
	Session 4: Environmental Impacts to Coastal Fisheries and Software Demonstration
	Moderator: Courtney Buckley, NCWRC
1625 – 1645	The White Lake Fish Kill: Cause, Context, and Implications
	Kyle T. Rachels, NCWRC
1645 – 1705	Variability of Striped Bass Egg Characteristics in North Carolina Coastal Rivers
	Coro K. Kowalabuk NCSU
1705 –1710	Cara K. Kowalchyk, NCSU Fisheries Impacts of Hurricane Florence
1/03-1/10	risheries impacts of numcane riolence
	Kyle T. Rachels, NCWRC, Lightning Talk
1710 – 1730	Introduction to Visual Sampling Plan (VSP) - a Free Sampling Software
	Ned Jones, 1-alpha Solutions
1730 – 1740	Closing Comments, Tyler Black, NCAFS President
1740 - 1900	On Your Own

1900 – 2000	Poster Session
	Population Genetics of the Carolina Heelsplitter, <i>Lasmigona decorata</i> , a Critically- Endangered Freshwater Mussel presented by Victoria C. Fowler, ASU
	• Analysis of Fish Collections Data Shows North Carolina Steam Fish Communities are Influenced by Beaver Activity presented by Samuel Fritz, ASU
	• Estimating Stock Structure of Cobia, <i>Rachycentron canadum</i> , Using Acoustic Telemetry presented by Riley M. Gallagher, NCSU
	• Phylogeographic Patterns Among the Lanceolate <i>Elliptio</i> Species Complex presented by Hans R. Lohmeyer, ASU
	 Assessing the Recovery of Freshwater Mussel Populations Following Dam Removals presented by Vincent Santini, ASU
	 Muskellunge Angler Success on Western North Carolina Waters presented by David L. Yow, Western North Carolina Muskie Club
1900 – 2200	Social, Dinner, and Student Raffle
Thursday 21 Febr	
TIME	Brookstown Inn – Grand Ballroom
	Session 5: Fishery Management
	Moderator: Ben Ricks, NCWRC
0830 – 0850	Evaluation of Striped Bass Stocking at Badin Lake Using Parentage Based Genetic Tagging
	Lawrence Dorsey, NCWRC
0850 – 0855	Indirect Impacts of Modern Bass Fishing: Looking Past Traditional Bass Population Dynamics
	Seth Mycko, NCWRC, Lightning Talk
0855 – 0915	The Effect of Long-term Stocking Programs on Genetic Diversity
	Heather K. Evans, North Carolina Museum of Natural Sciences
0915 – 0935	Population Characteristics and Simulated Exploitation Responses of Common Carp, <i>Cyprinus carpio</i> , in Lake Mattamuskeet
	April D. Lamb, NCSU
0935 – 0940	Evaluation of Coded Wire Tag Retention in Brown Trout, Salmo trutta, Fingerlings Tagged at
	Three Anatomical Locations
	Jacob M. Rash, NCWRC, Lightning Talk
0940 – 0945	Lake Gaston Catfish Sampling Update
	Clint W. Morgeson, NCWRC, Lightning Talk
0945 – 1005	BREAK
	Session 6: Imperiled and Rare Species – Fish, Amphibians, and Crayfish
1005 1025	Moderator: Dylan Owensby, NCWRC
1005 – 1025	Sicklefin Redhorse Survival in the Little Tennessee River Basin
	Jason Doll, University of Mount Olive

1025 - 1045	Engaging North Carolina's Trout Anglers to Help Conserve Eastern Hellbenders
	Jacob M. Rash, NCWRC
1045 – 1050	Preventing Extinction of the Carolina Madtom, Noturus furiosus
	Sarah McRae, U.S. F&WS, Lightning Talk
1050 – 1055	Phylogenetic Survey of Crayfish in the Catawba River Basin Reveals a New Species Endemic
	to the South Mountains of Western North Carolina
	Michael A. Perkins, NCWRC, Lightning Talk
1055 – 1115	Ghost of Ichthyologists Past - The Longear Sunfish, Lepomis megalotis, in North Carolina
	Bryn H. Tracy
1115 – 1120	Closing Remarks, Tyler Black, NCAFS President
1120 - 1300	LUNCH – on your own
1300 - 1500	NCAFS Business Meeting
1500	Adjourn

Continuing Education Course Wednesday, February 20, 2019

0800 - 1130

Grand Ballroom

Aquatic Nuisance Species In North Carolina – Where We Are, Where We Are Headed, And Things We Can Do To Help!

Join us for a morning of engaging talks about a variety of aquatic nuisance species (ANS) in North Carolina (NC). We'll discuss some of the major ANS issues in NC, current control efforts, and what we as NCAFS members can do to help. To assist us on this journey, we have assembled a diverse group of knowledgeable & willing instructors to lead the workshop:

- Chris Goudreau, North Carolina Wildlife Resources Commission Biologist & NC ANS Management Plan Steering Committee member, will introduce and discuss the NC ANS Management Plan.
- Bryn Tracy, retired fisheries biologist, will discuss nuisance freshwater fish species the good, the bad, and the ugly.
- North Carolina Wildlife Resources Commission Aquatic Wildlife Diversity staff members Thomas Russ, Luke Etchison, and Dylan Owensby will provide information about nuisance crayfish and mollusks.
- Erika Haug and Jessica Baumann, with the North Carolina State University Aquatic Plant Management Program, will highlight aquatic nuisance plant issues.

POSTER SESSION

Population Genetics of the Carolina Heelsplitter, *Lasmigona decorata*, a Critically-Endangered Freshwater Mussel

Victoria C. Fowler* and Michael M. Gangloff *Presenter

Analysis of Fish Collections Data Shows North Carolina Steam Fish Communities are Influenced by Beaver Activity

Samuel Fritz*, Michael Gangloff, Michael Madritch, and Robert Creed *Presenter

Estimating Stock Structure of Cobia, Rachycentron canadum, Using Acoustic Telemetry

Riley M. Gallagher*, Jacob R. Krause, and Jeffrey A. Buckel *Presenter

Phylogeographic Patterns Among the Lanceolate Elliptio Species Complex

Hans R. Lohmeyer*, Michael M. Gangloff, Victoria C. Fowler, Jon. D. Wells, and Gretchen. L. Bailey *Presenter

Assessing the Recovery of Freshwater Mussel Populations Following Dam Removals

Vincent Santini* and Michael Gangloff *Presenter

Muskellunge Angler Success on Western North Carolina Waters

David L. Yow