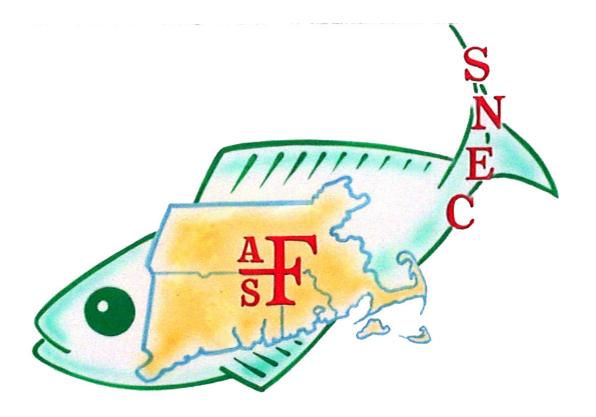
2020 Science Meeting



Southern New England Chapter American Fisheries Society

January 12-14, 2020

Hyatt Regency Cambridge Cambridge, MA

Thanks to our White Shark level sponsors!









Finding the ways that work



Sunday (1/12/2020)

| 8:00am - 5:00pm | REGISTRATION | |
|------------------|---|---|
| | <u>Room:</u> Thomas Paine | <u>Room:</u> William Dawes |
| 9:00am - 12:00pm | Student-Professional Mixer: Preparing for Successful Recruitment as an Early Career AFS Member | Introduction to Plotting Using R |
| 12:00pm - 1:00pm | LUNCH (on your own) | |
| 1:00pm - 4:00pm | CANCELLED: Marine Botanical Seaweed Pressing Workshop | Advanced Plotting Using Special Data in R |
| 5:00pm - 8:00pm | WELCOME RECEPTION (Charles View Ballroom – 16 th floor) | |

Student-Professional Mixer: Preparing for Successful Recruitment as an Early Career AFS Member

Both professional and student employees are encouraged to sign up for this networking mixer. This workshop is designed to connect current fisheries students with a diverse panel of professional mentors to socialize and exchange questions, advice, and insight on professional development or career paths. Professional attendees will represent universities, agencies, and other organizations, and will present students with an opportunity to engage and ask important questions. This is a multi-session style workshop where session topics are as follows: Open Discussion, Resume Development, and Interviewing.

Marine Botanical Seaweed Pressing Workshop

Seaweed pressing was a popular art form during the Victorian era when people summered on the coast. Seaweed was admired for its beauty and pressed into scrapbooks with other mementos like poetry, watercolors & anything that was a happy reminder of their experience.

The process: After collecting specimens, buckets of seaweed are loaded into containers of clean, salt water. Trays are set up to study the different species and speculate on collage combinations. Other materials are rag paper, blotter paper, towels, nylon cloth, cardboard and weights. Small tools, such as tweezers, scissors, toothpicks, soft bristle brushes, glue and razor blades are also used as needed.

Once the seaweed is positioned on the paper as desired, and the excess water removed, it is ready for pressing. The collage is transferred to fresh blotter paper with the nylon cloth placed on top to prevent sticking, then sandwiched into cardboard. The package is placed onto a flat surface and weighted down. The element of surprise is also a factor in this process and you won't know what the end result will be until it is completely dry. The drying time is usually a couple of days to a week.

For more information about seaweed pressing, you can visit the Saltwater Studio website at https://www.saltwaterstudio.biz/

Introduction to Plotting Using R

This course will introduce plotting some of the more basic figures and graphs using R. This course will cover how to create histograms, box plots, scatter plots, and tables. This course already assumes that you know how to enter and read data files. More information will follow in the coming weeks.

Advanced Plotting Using Special Data in R

This course is designed for people who are interested in creating plots and figures in R using high-resolution special data. This is an advanced course and is for individuals who are proficient in R and are already familiar with the basics of plotting. More information will follow in the coming weeks.

Monday (1/13/2020)

| 7 20 | Monday (1/13/2020) | |
|-------------------|---|--|
| 7:30am - 4:30pm | REGIS | TRATION |
| 8:00am - 9:20am | PLENARY PRESENTATION: Dr. John Farrell - Longitudinal Studies & Research on the St. Lawrence River: Ecological Change, Habitat, & Fisheries <u>Room:</u> Ballroom AB | |
| 9:20am - 9:50am | BI | REAK |
| | <u>Room:</u> Molly Pitcher | <u>Room:</u> Haym Salomon |
| | Symposium: New England Supporting Fisheries Reforms in China (moderator: R. Boenish) | General Session |
| 9:50am - 10:10am | Su et al.* Evolution of Marine Fisheries Management in China from 1949-2019: How Did China Get Here and Where Does China Go Next? | Concannon & Baumann* Long Term CO ₂ and Temperature Effects on Fecundity and Oocyte Recruitment in the Atlantic Silverside |
| 10:10am - 10:30am | Helmuth et al. Conservation Physiology: A Mechanistic Approach to Informing Sustainable Fisheries in China | DeCelles & Vidal Long-Term Changes in the Maturation and Growth of Cape Cod/Gulf of Maine Yellowtail Flounder |
| 10:30am - 10:50am | Li et al.* Are Cost-Minimizing Spatial Management Strategies Effective in Dynamic Social-Ecological Systems? A Case Study in China | Kasper & Schultz* Stock Management by Population Fecundity |
| 10:50am - 11:10am | Suatoni et al. A Comparative Analysis of Science-Based Decision Making Processes in Fisheries Management | Wuenschel & Deroba The Reproductive Biology of Female Atlantic Herring in US Waters: Validating Classification Schemes to Assess the Importance of Spring and Skipped Spawning |
| 11:10am - 11:30am | Kritzer et al. Confronting Scientific, Economic, and Management Challenges in the Fujian Swimming Crab Fishery | McBride et al. A Cooperative Approach to Build a Wolffish Maturity Schedule for the Next Stock Assessment |
| 11:30am - 11:50am | Chang The Case Study of Marine Fisheries Partnership: From Scientific Exchange to Global Collaborations | Sutherland et al. An Age Validation Study of Illicia and Vertebrae of Monkfish, <i>Lophius americanus</i> |
| 11:50am - 12:50pm | | on your own) |
| | General Session | Symposium: Big Rivers (moderators: G. Gries, N. Popoff) |
| 12:50pm - 1:10pm | Rodgers et al. Application and Ecosystem Improvements of Large Woody Material in Headwater Streams | Sprankle & Desmarais Adult Blueback Herring (<i>Alosa aestivalis</i>) Spawner Age Structure, Over Time and Space in the Lower Connecticut River Basin (2013-2018) |
| 1:10pm - 1:30pm | Jackson Assessing Barrier Effects of Road-Stream Crossings on Fish and other Aquatic Organisms in the Northeastern United States | Bailey et al. Herring Restoration on the Merrimack River - Looking for Long Term Stability |
| 1:30pm - 1:50pm | Rackovan et al. Modular and Scalable Downstream Bypass System for Silver American Eels | Castro-Santos et al. Effects of Plunge Pool Configuration on Downstream Passage Survival of Juvenile Blueback Herring |
| 1:50pm - 2:10pm | Gahagan et al. Linking Life Stages: Exploring Alewife Population Fluctuations | Bell Watching the River Flow: Re-connecting Maine's Rivers |
| 2:10pm - 2:30pm | Archer et al. Passage of Alewife (<i>Alosa pseudoharengus</i>) Before and After a Dam Removal on Town Brook in Plymouth, Massachusetts | Kennedy et al. Habitat Persistence Across Space & Time: A Novel Approach for Instream Habitat Assessments |
| 2:30pm - 2:50pm | BI | REAK |
| 2:50pm - 3:10pm | Hammer et al.* Movements and Feeding of Arctic Char Relative to Summer Ice-Off in an Arctic Embayment | Pascucci & Rountos Impacts to the Feeding Behavior of Larval Sheepshead Minnow (<i>Cyprinodon variegatus</i>) Exposed to the Harmful Dinoflagellate <i>Cochlodinium polykrikoides</i> |
| 3:10pm - 3:30pm | Dean et al. Haddock Without Cod: A Habitat Model to Help Recreational Anglers Catch One Species and Avoid Another | Gardner et al. Survival and Condition Evaluation of the Scotland Fish Lift |
| 3:30pm - 3:50pm | Bethoney et al. Testing a Pelagic Species Distribution Model to Forecast River Herring Bycatch Hotspots | Staudinger The Role of Sand Lances (<i>Ammodytes</i> sp.) in the Northwest Atlantic Ecosystem |
| 3:50pm - 4:10pm | Curtis et al. Vertical Movements of Young-of-the-Year White Sharks in a Summer Nursery Area - Implications for Bycatch Susceptibility | |
| 4:10pm - 5:30pm | Poster Session (<u>Room:</u> Charles View Room – 16 th floor) | |
| 6:00pm - 10:00pm | New England Aquarium Networking Event (transportation provided) | |
| | *indicatos student presentation | |

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Tuesday (1/14/2020)

| | Tuesday (1/14/2020) | | |
|-------------------|---|---|--|
| 7:30am - 11:50pm | REGIS | TRATION | |
| 8:00am - 9:20am | Plenary Presentation: Dr. Lisa Kerr - Climate Challenges to Fisheries Management in a Rapidly Changing Ecosystem <u>Room:</u> Ballroom AB | | |
| 9:20am - 9:50am | BI | REAK | |
| | <u>Room:</u> Molly Pitcher | <u>Room:</u> Haym Salomon | |
| | Symposium: Fish as Indicators of Environmental Quality (moderator: M. Lally) | Symposium: Research in Support of Sustainable Seafood (moderators: A. Jordaan, M. Wilsterman) | |
| 9:50am - 10:10am | Pelletier Summer Water Temperature Regimes in Heavily Forested Yet Significantly Impounded Sub-watersheds and Associated Impacts on Eastern Brook Trout (<i>Salvelinus fontinalis</i>) | Schumann et al. (Sea)food for Thought: Envisioning a Role for Marketplace Activism in Ecosystem-Based Fisheries Governance | |
| 10:10am - 10:30am | Becker et al. Update on PFAS in New York State Fish | Archer et al. Market Development to Diversify Shellfish Aquaculture Products in Massachusetts | |
| 10:30am - 10:50am | Thomas et al.* Integrating eDNA Fish Community Analysis into Stream Assessments | Long et al. Realizing the Potential of Underutilized Local Seafood: Producing, Certifying, and Marketing Refreshed Scup Fillets | |
| 10:50am - 11:10am | Anatone & Chernoff* Fish Muscle Tissue Alone does not Indicate the Environmental Quality of a Historically Mercury Polluted River | Davis et al.* Assessing Consumer Access and Perceptions Towards Underutilized Fish Species: Key Ingredients for Cooking Up Future Sustainable Seafood A-fish-ionados | |
| 11:10am - 11:30am | Roy et al. Unpacking Fish Responses to Impervious Cover in Massachusetts | Panel Discussion (facilitator: K. Masury) : Ecosystem-Based Fisheries Marketing: A New Paradigm | |
| 11:30am - 11:50am | Bellucci & Becker Cold Water Stream Habitat in Connecticut | for Sustainable Seafood? | |
| 11:50am - 12:10pm | Quiñones & Mattocks Tracking the Condition of Massachusetts' Large Rivers | | |
| 12:10pm - 1:10pm | | n your own) | |
| 1:10pm - 2:10pm | BUSINESS MEETING & AWARDS (<i>Room: Ballroom AB</i>) | | |
| | General Session | General Session | |
| 2:10pm - 2:30pm | Weston et al. Understanding Climate Impacts on Marine Biodiversity and Community Structure in the Gulf of Maine | Ryan et al.* Assessing the Productivity of Juvenile Atlantic Salmon in Maine Streams Through a Long-term Electrofishing Dataset | |
| 2:30pm - 2:50pm | Ellertson & Glass Embracing Ecosystem Change and Creating Resilience: Lessons Learned from CFRF's Lobster and Jonah Crab Research Fleet | Truesdale et al. Assessing the Impact of an Open-cycle Power Plant on Local Fish Communities: Revisiting Mt. Hope Bay After the Decommission of Brayton Point Power Station | |
| 2:50pm - 3:10pm | Collie et al. The URI-GSO Fish Trawl Survey: Documenting 60 Years of Ecosystem Change in Narragansett Bay | Balouskus Designing a Long-Term Ventless Fish Pot Monitoring and Assessment Program for Recreationally Important Rhode Island Finfish | |
| 3:10pm - 3:30pm | Cadrin et al. Cod Movement Patterns from a Century of Tagging off New England | Turner et al. Does Fyke Net Sampling Accurately Characterize Anadromous Rainbow Smelt, <i>Osmerus mordax</i> , Spawning Population Demographics in a Coastal Massachusetts | |

| 3:30pm - 3:50pm | BREAK | |
|-----------------|--|---|
| 3:50pm - 4:10pm | Duarte Use of Decision Tree Models in Improving Quality of Fisheries Dependent Data | Price et al. Comparing Localized Feeding Ecology of Black Sea Bass (<i>Centropristis striata</i>) at Natural and Artificial Reefs Using Stomach Content and Stable Isotope Analyses |
| 4:10pm - 4:30pm | Langan et al.* A Bayesian State-Space Approach to Improve Projections of Stock Biomass for Managing New England Groundfish | Ford et al. The Massachusetts Aquaculture Permitting Plan: An Update |
| 4:30pm - 4:50pm | Williams Lessons from Disputes over Science: What Can Negotiation Teach us about Groundfish? | Nebiolo & Meyer A Novel Method for Synchronizing Clocks and Removing Multipath Error Associated with Acoustic Tagging Technologies |
| 4:50pm - 5:10pm | Lucey et al. Exploring Uncertainty in Qualitative Models | Barrett et al. Improving Juvenile Fish Populations Through Habitat Enhancement: Evaluating the Use of Oyster Reefs as a Tool to Increase Fish Abundance |

*indicates student presentation

Support of our sponsors is gratefully acknowledged









Finding the ways that work













