	Johnson A Room,	Johnson B Room,	Latrobe Room,	Peale A,	Peale B,	Peale C,	Promenade,	Stadium 1 Room,	Stadium 3 Room,	University 1,
	Hilton	Hilton	Hilton	Advances in life history and	Hilton	Hilton	Marriott Climate change effects on fish	Marriott Scale V.2021: Choosing &	Marriott	Marriott
	Contributed Papers: Invasive Carp	Contributed Papers: Marine Fish Ecology	Inland fishes and fisheries with global change	environmental reconstruction using biogenic structures from organisms	Contributed Papers: Marine Habitats and Management	Native fish restoration in lakes- how can history inform the future?	and fisheries: Understanding, forecasting, and communicating impacts	Matching scales for aquatic field data: status, options, and knowledge gaps	Contributed Papers: Fishery dependent observing and monitoring	Growing fisheries research and management through angler engagement
8:00 AM		Diet of Crevalle Jack (Caranx hippos) in the north-central Gulf of Mexico Jargowsky, Matthew	Climate Change Effects on North American Fishes to Inform Adaptation Strategies Paukert, Craig	Emerging methods in analyses of continually growing structures (CoGS) in marine mammals Crain, Danielle	Decadal Changes in Reef Fish Diversity in the Philippines Whalen, John	(Cancelled) Comparing Historical and Contemporary Cisco Morphology	Untangling the effects of hydrologic change on trout in Wisconsin streams Maitland, Bryan	Scale V.2021: Identifying Current Issues that Address Future Needs for Making Scale Choices that Hitchman, Sean	Using a fishery-dependen t research fleet approach to characterize the composition of black sea ba Verkamp, Hannah	Introduction
8:20 AM	Quantifying How Orientation Affects Target Strengths of Silver Carp (Hypophthalmich thys molitrix) Peters, Andrew	Crevalle Jack (Caranx hippos) Age and Growth in the Gulf of Mexico Jefferson, Amanda	The Fish and Climate Change (FiCli) Database Findings on Climate Change Impacts and Management Ac Zhang, Ray	Inferring life history variation in spatial, trophic and physiological ecology through compound-s Trueman, Clive	Implications of community-based management of marine reserves in the Philippines for reef fish co Marriott, Sara	An Adaptive Management Approach to Restoring Paddlefish in Oklahoma Reservoirs Long, Jim	Scale dependencies of intrinsic climate sensitivity for freshwater fishes of the United States Silknetter, Sam	Considering questions of scale in research: examples from lotic, lentic, and coastal systems DeVries, Dennis	Electronic Technologies in the United States Atlantic Pelagic Longline Fishery Miller, Ian	Keynote
8:40 AM	Detection and Occupancy Probability of Bigheaded Carp and Native Fish Larvae in the Upper Mississ Yff, David	The Bigger, Older, Fatter, and More Fecund Female (BOFFF) Factor in Greater Amberjack (virtual) Murie, Debra	Fishers' Response to Temperature Change Reveals the Importance of Integrating Human Behavior in C Fiorella, Katie	Reconstructed trophic and geographic histories of reef-dwelling and migratory fishes based on eye Wallace, Amy	Diversity patterns of subtropical fish assemblages on artificial and natural reefs in the eastern Schram, Michael		THE EFFECT OF RUNOFF INDUCED RAPID TEMPERATURE CHANGE ON THE PHYSIOLOGICAL PERFORMANCES OF BLACKN Gruber, Danielle	Landscape-scale trends in stream fish data collection locations across the U.S.: Challenges and o Infante, Dana	Crabs are like fish, only different Stevens, Bradley	Keynote
						Contributed Papers: Reservoir fisheries management				

9:00 AM	Determining how invasive Silver Carp (Hypophthalmich thys molitrix) influence trophic structure of Kowalski, Justin	Modeling the energetic implications of early life responses to ocean acidification in an estuarin Schwemmer, Teresa	Predicting future using experience from artificially heated water systems: impacts on stock produ Audzijonyte, Asta	Stable isotopes of sea lamprey lenses used to explore at sea behavior Evans, Thomas	Identifying drivers of coral-reef fish biomass in the Florida Keys to assess potential management Zuercher, Rachel	Wicked problems and messy data: assessing the effects of zebra mussels on walleye recruitment in Kundel, Holly	Performance consequences of thermal adaptation in geothermal sticklebacks Smith, Bethany	Barrier removal and remediation in the Great Lakes: Accounting for scale in the decision process Robinson, Kelly	Using fishing gears and species caught by foreign fleets to understand differential African marin Nyameke, Isaac	Fish are Just Like Birds!(?) Bonney, Rick
									Contributed Papers: Fishery Statistics	
9:20 AM	An experimental assessment of mollusk vulnerability to juvenile Black Carp predation Runyon, Andrew	Quantifying the response of the estuarine nekton community following restoration of coastal wetla Mahoney, Richard	The Road of Good Intentions for Mitigating Hydropower Impacts on Fisheries Claussen, Julie	New tools to measure restoration success: eye lenses archive juvenile habitat use of adult salmon Jeffres, Carson	Spatiotemporal variation of an Eastern Tropical Pacific pelagic vertebrate community assessed wit Plum, Tyler	Influence of Blueback Herring, Alosa aestivalis, in a Reservoir Stell, Ehlana	Investigating the effects of multiple flow regime characteristics on recruitment of age-1 Atlanti Baker, Michael		Time to publish? Turnaround times, rejection rates, and impact factors of journals in fisheries s Runde, Brendan	Forced Marriage Or Perfect Union? Over 20 Years Building and Maintaining Angler Engagement to Kee Schreier, Sarah
10:00 AM	Evaluating alternative common carp control strategies in a large, dynamic, open ecosystem Wallace, Ellie	Community dynamics of estuarine forage fishes Peake, Jonathan	Structure and scale in spatially synchronous southeastern US trout populations Valentine, George	Tracking fish dietary changes in response to hypoxia using the elemental and isotopic composition Miraly, Hadis	Ocean quahogs: a glimpse into the population structure of the longest-lived bivalve on Earth usin Hemeon, Kathleen	Enhancing capacity of the Midwest Glacial Lakes Partnership: Improved information on glaciated Ross, Jared	Evaluating the Effectiveness of Great Lakes Sea Lamprey Control Barriers in an Uncertain Climatic Buckley, Connor	Uncertainty in Spatial Scaling: Revisiting Thresholds in Fisheries Data Garvey, James	Evaluating the Performance of Methods Used to Estimate Growth Parameters from Subsampled Age Data Middaugh, Chris	Texas Trash to Texas Treasure – Angler Involvement in Management and Research of the Alligator Gar Daugherty, Dan
			Contributed Papers: Black Bass							
10:20 AM	Exploring Invasive Carp Reproduction in Small Rivers of Illinois Landry, Adam		Movement Dynamics and Habitat Use of Suwannee Bass in Georgia Yeager, Joel	Can otolith microchemistry be used to quantify fish movement downstream of a hydropeaking dam?	Examining spatial heterogeneity trends in ocean quahog growth and recruitment Sower, Jillian	Comparison of fishery-dependen t and fishery-independ ent Common Carp and Bigmouth Buffalo mark-rec	Asynchronous responses to common climate forcing among brook trout populations in Cape Race, Newf Gallagher, Brian		A Novel Bioeconomic Approach to Improve Allocation Processes for Living Marine Resources Meyers, Stephen	Tournament Talks: Will anglers engage and participate in virtual webinars? Hamilton, Shayna

10:40 AM	Evaluating movement of Silver Carp in an oxbow lake to inform barrier placement and operation Besson, Jordan	Evaluating the impacts of Atlantic striped bass harvest control rules on their prey, Atlantic men Schiano, Samantha	Evaluation of lake-wide population characteristic differences between the Northern Largemouth Bass Middaugh, Chris	Lifetime-scale Red Grouper ontogenetic movement and diet shifts using a combination of traditional Vecchio, Julie	Collaborative modeling of Eastern Oyster management options in the Chesapeake Bay, Maryland Wilberg, Michael	Hierarchical Model to Predict Common Carp and Bigmouth Buffalo Abundance from Electrofishing Catc Simonson, Martin	Can Columbia Basin Sockeye Salmon adapt to climate change? Fryer, Jeffrey		Evaluating how Complexity of Alternative Stock Assessment Models affects Perception of Summer Flo Solinger, Laura	Long-Term Relationship Building with Anglers: A Case Study with the Muskellunge Angling Community Landsman, Sean
11:00 AM		Temporal changes in the reproductive ecology of the estuarine Conguito sea catfish are related to Amezcua, Felipe	Analysis of Size Structure of Largemouth Bass (Micropterus salmoides) in Georgia Reservoirs with Daley, Jacob	Marked recent declines in boron in Baltic Sea cod otoliths – a bellwether of incipient acidificat Limburg, Karin	Fisheries Conflicts with Sand Dredging: Baselines and Early Geospatial Analysis Iwicki, Carolyn	Gear Bias of low-frequency electrofishing for sampling Blue Catfish populations in Oklahoma reser Montague, Graham	Thermal and Potential Climate Effects on Early Life Stages of White Perch Minch, Benjamin			Let's Talk About It: How Arkansas Game and Fish Commission's Fisheries Division changed the messa Feltz, Jessica
11:20 AM		Descender Devices or Treat Tethers: Does Barotrauma Mitigation Increase Opportunities for Depreda Drymon, Marcus		Evaluating the effects of three Alabama River dams on fish movements using otolith microchemistry Rotar, Christopher		Technological Advances and Their Potential Influence on Table Rock Lake Crappie Schmitz, Grant	How will changes in extreme precipitation events impact Eastern oyster (Crassostrea virginica) ec Barr, Janine		Comparing distributions using the recently developed overlap statistic η-hat: Examples and sugges Zentner, Douglas	Growing Angler Engagement through Cooperative Tagging Research Musick, Susanna
11:40 AM				RECONSTRUCTIN G LIFE HISTORIES OF WHITE SHARKS USING VERTEBRAL CHEMISTRY Mohan, John		Using a mixed-methods approach to assess char diversity in the central Canadian Arctic Weinstein, Spencer				
			Influence of Habitat, Land-Use, Infectious Agents, Environmental Stressors on					Standardizing recreational fishing data collection applications		

		Smallmouth Bass						
1:00 PM	First insight into plastics ingestion by fish in the Gulf of California, Mexico Amezcua, Felipe	Using Visual Indexes of Macroscopic Indicators to Assess Temporal Trends in Smallmouth Bass Fish Keplinger, Brandon	Canaries in the Baltic Sea "Coal Mine": Fish Otoliths Document Accelerating Climate Impacts Heimbrand, Wette	Rock(fish) around the clock: depths and activity levels of threatened Puget Sound rockfish Danielson, Zofia	Assessing shifts in benthic and pelagic community coupling in the Northwest Atlantic: Are communi Fenwick, Ileana	Development of the SciFish application, a customizable citizen science project builder Byrd, Julia	Identifying gillnet bias in the sampling of estuarine predators within a temperate estuary Plumlee, Jeffrey	Engaging anglers in SCDNR's fish tagging efforts Perkinson, Matt
1:20 PM	The lack of recovery of eastern Baltic cod: impacts of environmental hypoxia on community dynamics Duskey, Elizabeth	Evaluation of a Fish Health Assessment Index Applied to Smallmouth Bass of the Chesapeake Watershed Jensen, Josiah	Using otolith microchemistry to determine natal origin of black sea bass (Centropristis striata) Koob, Elise	Using larval transport models to evaluate marine protected areas in the U.S. South Atlantic regio Brothers, John	(Cancelled) Impacts of temperature variability on marine fisheries in the Northeast Shelf Regional Ecosystem	Minimizing Bias in Citizen Science Cathey, Andrew	Effects of gear and fate on estimates of size-selectivity from mark-recapture experiments in thre Stevens, B.	Using App Based Tournaments as a Source of Fisheries Data Quinn, Danielle
1:40 PM	Comparing methods for externally attaching electronic tags to fish: assessment of tag retention, Tharp, Ryan	Smallmouth Bass, Micropterus dolomieu, Microplastic Consumption over Space and Time in three Zipp, Kaylyn	Ontogenetic patterns of elemental tracers in the vertebrae cartilage of coastal and oceanic sharks Livernois, Mariah	Research and development of a replicable evaluation framework for MPA sustainable finance Bohorquez, John	Historical range shifts and the influence of global warming on ocean quahogs (Arctica islandica) LeClaire, Alyssa	Non-probability Sampling in Fishing Effort and Catch Surveys <i>Brick, J. Michael</i>	A proposed publicly available known-age fish structure repository Koch, Jeff	Penn State Trout Angler Science Study: Lessons we learned so you don't have to Mueller, Sara
							Contributed Papers: Fishery dependent observing and monitoring	
2:00 PM	Life history and Reproductive Strategies of Callinectes sp. in a Tropical Urban Estuary Pares, Olivia	Patterns in melanistic lesions in Smallmouth Bass in the Susquehanna River Basin, Pennsylvania Smith, Geoffrey	Age validation using periodicity of annulus formation and hardpart microconstituents in black sea Frey, Benjamin				We know Canadian Anglers struggle to identify fish, we just can't prove it (Yet) Hamilton, Shayna	TrophyCatch: angler recognition, citizen science, and trophy bass conservation Dutterer, Andrew

2:20 PM						How do you engage your anglers? Every way you can! Kopaska, Jeffery
2:40 PM	Manageme status and condition of non-federa managed fisheries Odell, Jay	of US				
3:00 PM						TNC Angler Engagement <i>Moss, David</i>
3:20 PM						Importance of fish body size information in citizen science data collection tools Audzijonyte, Asta
3:40 PM						Development of a Fish Identification Tool for Alaskan Fishes <i>Eroh, Guy</i>
4:00 PM						Panel Discussion

	Douglass Room, Hilton	Harbor 1 Room, Marriott	Johnson A Room, Hilton	Johnson B Room, Hilton	Latrobe Room, Hilton	Peale A, Hilton	Peale B, Hilton	Peale C, Hilton	Promenade, Marriott	Ruth Room, Hilton	Stadium 4 Room, Marriott	Stadium 5 Room, Marriott	University 1, Marriott
	Planning for coldwater fisheries resources: modeling and managing temperature impairments	Keeping cool: thermoregula ting in a changing world	Interactions between offshore wind, fisheries, and fisheries resources	Using indicators of ecological resilience to inform conservation /management of freshwater ecosystems	Investments in fish habitat science to support resilient fish populations	Advances in life history and environment-al reconstruction using biogenic structures from organisms	Atlantic Striped Bass populations: past, present and future challenges	Creating and implementing ecosystem wide integrated research/ conservation plan for prairie streams	Climate change effects on fish and fisheries: Understand- ing, forecast- ing, and communicat- ing impacts	Fish passage through the ages – historical approaches, current innovations, and future opportunities	Tails from the Anthropo- cene-stories and lessons from 150 years of aquatic introduction s	Global fish biogeog- raphy and production, now and in the future	Cooperative research with stakeholders: recent progress and new directions
8:00 AM	Addressing Coldwater Temperature Impairments in a Changing Climate Kusnierz, Paul	A Decade of Thermal Hydraulic Modeling Improvements and Use in Understanding Thermal Impacts to R Li, Haifeng	Responsible Offshore Science Alliance (ROSA): Advancing coordinated regional research and monitor Hice-Dunton, Lyndie	Biological Indicators of Ecological Resilience for Informing Aquatic Ecosystem Conservation: Tro Hughes, Bob	Patterns in Seasonal Estuarine Residency of Mid-Atlantic Fishes in Relation to Climate Schonfeld, Adena	The N isotopic relationship between fish tissue and otoliths: controls and variation Lueders-Dumo nt, Jessica	Recent advances in understand-i ng Atlantic striped bass population dynamics and fishery management Sharov, Alexei		Quantifying the Effects of Temperature Change on Freshwater Fish Spawning Phenology LaRoque, Ashley				The Commercial Fisheries Research Foundation Research Fleets: Progress and New Directions Bethoney, N. David
8:20 AM	Thermal risk assessment for tailwaters in a changing climate Jager, Yetta	The salmon-peloto n: hydraulic habitat shifts of adult Atlantic Salmon (Salmo salar) due to behav O'Sullivan, Antoin	Responses of demersal fish and invertebrates to America's first offshore wind farm Wilber, Dara	Accounting for environment-tal uniqueness, connectivity, and biodiversity of freshwater habitats to Üblacker, Maria Magdalena	Combining historic records and habitat suitability analysis to assess the potential for Lake Stu Wirebach, Kylie		Decline and Restoration of the Delaware River Spawning Stock of Striped Bass: It is all About the Kahn, Desmond	Fish Community Changes Following Fall Drawdown in an Irrigation Canal and its Tributary Stream Wuellner, Melissa	Thermal tolerance of fish to heatwaves in agricultural streams: What does nou maket kill yos you Dai, Qihong			Estimation of size-specific catchability from survey trawl data Krumsick, Kyle	A Video Trawl Survey Reveals Ecological Influences on Yellowtail Flounder in Closed Area II, Geor Perez, Patricia

8:40	Water	An	Year one of	Functional	Understandin	Temporal and	Dovoloning	Impact of			In an	Review of the
8.40 AM		ecohydrologic	the South Fork	redundancy	g influences		Developing	Impact of Canal				VIMS
AIVI	Temperature	, .		· '	_	spatial	water				ecosystem	
	as it Relates to	al typology for	Wind Farm	as an	of landscape	variation in	temperature	Operations on the Fish			size	Industry-Base
	Minimum	thermal	Pre-Constructi	indicator of	factors on	growth in the	and				spectrum,	d Sea Scallop
	Flows on a	refuges in	on Beam Trawl	general	stream	Atlantic	dissolved	Communities			fear and	Dredge
	Large	streams and	Survey	ecological	habitat:	surfclam	oxygen	and Biomass			foraging	Surveys
	Regulated	rivers	Huntsberger,	resilience in	information	(Spisula	criteria and	of a			determine	Roman, Sally
	River	Sullivan,	Carlton	rivers: A	to conserve	solidissima)	visualizing	Connected			fish life	
	Kusnierz, Paul	Christopher		national	Michigan	Hollander,	the effect on	Prairie			histories	
				pers	Betances,	Alexis	summer h	Stream			Kindsvater,	
				Brumm, Kyle	Samantha		Parham, Tom	Koupal, Keith			Holly	
9:00	Clean Water	Dams May	Leveraging	Conserving	These	Analysis of	What Do				Emergent	Analysis of
AM	Act Tools to	Force	historic data	the	turbulent	plus-growth in	Simple				Effects of	Gear
	Address	Semelparity in	collections	Freshwater	times:	wild Atlantic	Long-Term				Species Shifts	Requirement
	Thermal	Atlantic	and new	Stage:	interactions	smolt scales in	Egg and				in the Rapidly	s for the
	Impairments	Salmon	collaborations	Resilience of	between fish	the East	Juvenile				Warming Gulf	Fixed Gear
	of Cold Water	Rubenstein,	to better	Freshwater	and	Machias river,	Indices Say				of Maine	Lobster
1	Habitat	Sarah	understand	Ecosystems	turbulence-g	Maine over a	About				Weisberg,	Fishery in the
1	Mugunthan,	our un	Atlantic	to a Changing	enerating	7 year	Chesapeake				Sarah	Gulf of
	Pradeep		Sturgeon	Climate	simulated	Sharpe, Mya	Bay Striped				Jaran	Maine, With
	тишеер		Breece,	Khoury, Mary	instream	Sharpe, wya	Bass					Poten
			Matthew	Knoury, wary	res		Productiv					Willse,
			Widthew		Strailey,		Uphoff,					Nathaniel
					Katherine		James					Nathamer
0.20	Multi-model	NA-deline ene	Diagl. Cap Dage	Indicators of		Ai	Climate		Resiliency of		landinetina	Frankrations
9:20		Modeling area	Black Sea Bass		Trophic	Assessing			,		Implications	Evaluating
AM	evaluation of	of cold-water	and Coral	Freshwater	ecology and	spatiotempora	Effects on		Apache Trout		of the	the effects of
	longitudinal	plumes in	Habitats in the	Flow	species-habit	I trends in	the Timing of		Habitats in a		interaction	a deep-water
	stream	Sainte-Margue	Mid-Atlantic	Conditions in	at	hatch and	Maryland		Warmer and		between fish	marine .
	temperature	rite river,	Bight:	an Altered	associations	metamorphosi	Striped Bass		Drier Climate		distribution	protected
	gradient	(Canada) using	Implications	and Imperiled	of gars	s timing of	Spawning		Future		shifts and	area a
	Hayes, Daniel	non-determini	for	Estuary	(Lepisoste-	YOY Southern	Runs Using		Dauwalter,		migration	decade after
		stics	Windpower	Swanson,	idae) in a	Flounder	Spawning		Daniel		distances on	closure:
		Hani, Ilias	Development	Christina	Mississippi	(Paral	Stock,				energ	results and
			Stevens,		River	Beeken,	Taggin				Slesinger,	
			Bradley		Baetz, Audrey	Nicolette	Giuliano,				Emily	Runde,
							Angela					Brendan
9:40												
AM												

10:0 0 AM	A Temperature TMDL Implementatio n Guidance for Coldwater Designated Uses and Fisheries Resources Leiman, Jonathan			(Cancelled) Quantifying Flow–Ecology Relationships across flow regime class and ecoregions in South Carolina	Seasonal & Tidal Movement Patterns of Red Drum in a Restored Seascape Ramsden, Sarah	Evaluation of the climate- growth relationship and natural mortality of an unfished gastropod (Buc Borsetti, Sarah	Histologically Determined Atlantic Striped Bass Female Age-At-Matu rity Brown, Simon	Characteris-ti cs of the natural flow regime paradigm explain occurrence of imperiled prairie fishes Nguyen, Erin	Overview of 111 World Aquatic Scientific Societies Statement on Human-Cause d Climate Change Bonar, Scott			Chasing new frontiers with pop-up satellite tags: understand-ing reproductive ecology, toxicology and Schlenker, Lela	Shorter seasons reduce for-hire fishing effort in a multispecies marine fishery Trudeau, Ashley
10:2 0 AM	Temperature TMDL Development for Coldwater Designated Uses in Maryland Kasko, Anna			Variations in field metabolic rate derived from otolith stable isotopes reveal complex interactio Jones, Joseph	Growth in large river deltas by an estuarine-de pendent fish: evidence from otoliths Muscat, Abigail	Diet isotope chronology reveals linkages between marine food webs, thiamine deficiency, and repro Johnson, Rachel	Differential migration and mortality in Chesapeake Bay Striped Bass Secor, David		Washington Policy Update: US Climate Legislation Winters, Drue			An overview of the use of isotope-base d estimates of field metabolic rate and experienced tempera Trueman, Clive	Improve-men ts in endangered species bycatch issues in fisheries associated with the marine steward Shiffman, David
1:20 PM	Development of Maryland coldwater resources mapping tool Kashiwagi, Michael	Contributed Papers: Aquatic ecology Thermal metabolic advantage: A mechanism for understanding the effect of temperature on predator McInturf, Alexandra	Assessing potential impacts of offshore wind development on the Southern New England cod fishery Frey, Alison	Confluences and Land Cover as Agents of Change: Temporal Habitat Variability Modifies the Movemen Hubbell, Joshua	Understand-i ng the effects of environment-tal variability on recruitment and abundance of penaeid sh Schlenker, Lela		Mycobacter-i al Prevalence In Hudson River Striped Bass Morone saxatilis Getchell, Rod		Contributed Papers: Climate change and management Climate-induc ed changes in the relative abundance of freshwater game fish inferred from angler ap McDonald, Zachary	Characterizing effects of stream fragmentation on migratory fishes across the conterminous United Dean, Emily	Leveraging big data to screen for lake invasions in the Upper Mississippi River Basin Weir, Jessica	Improving estimates of environment al limits to performance, metabolic scope, and viable habitat: Andres, Alyssa	Panel Discussion

											Jawless wonders: science to better understand and manage lampreys	
1:40 PM	Evaluation of landuse, habitat and water quality for modeling the distribution of Brook Trout in Goetz, Daniel	Phenotypic Level Changes Caused by Thermal Stress During Early Development in Zebrafish (Danio re Sloane, Kathryn	Gone with the Wind?: Assessing the Spatio-Tempor al Dynamics of Longfin Squid Suitable Habitat and Ober, Claire	Going the distance: Multiscale assessment of Conchos Pupfish (Cyprinodon eximius) abundance and d Elkins, Lindsey	Oyster Aquaculture Installations as Habitat: An Acoustic Telemetry Study of Juvenile Sheepshead McMains, Andrew	Mycobacteri osis of Striped Bass (Morone saxatilis) in Virginia tributaries of the Chesapeake Bay McGilly, Joshua	Enhancing conservation efforts of prairie stream ecosystems by developing integrated databases Gaughan, Sarah	Corps' Fish habitat restoration: examples from around the US Trulick, Jeffrey	Dam Removal in History, Current State of Removal, and Future Needs <i>Goll, Geoffrey</i>	Protecting our waters: Oh what 100 years does to provide perspective. Multi-jurisdic tional Appro Irons, Kevin	Let the right one in: exploiting behavioral traits of invasive sea lamprey to achieve selective f Hume, John	Panel Discussion
2:00 PM	Evaluating the Thermal Impact of Small Ponds in Maryland Trout Watersheds Eshleman, Adam	Assessment of Benthic Macroinverteb rate and Fish Communities within a Future Stream Mitigation Ar McCauley, Martha	The Potential to Model Future Range Shifts of Commercial Species and Their Fisheries: A Possible Powell, Eric	Patterns and predictors of Alligator Gar movement across mainstem-tri butary ecotones Roberts, Hayden	Identification of southern flounder migration corridors and spawning grounds in North Carolina McGarigal, Caitlin		Phenology and Habitat Utilization of Spawning Brook Trout in the Little Plover River, WI Coash, Natalie	Quantifying Spatio-Tempo ral Responses of Marine Ecosystems to Climate Change and Other Anthropoge Morano, Janelle	FishPass – confronting the connectivity conundrum Muir, Andrew	Hatchery Salmon and Ecological Overshoot Van Alen, Benjamin	Bottling Fear: Methods for Invasive Species Management and Conservation of Fishes Mensch, Emily	
2:20 PM	100 years of the North Branch Potomac River: An industrial watershed turned to cold-water success Selckmann, Gordon	How has extreme geomorphic change in a historically degraded desert river influenced both fish ha Remiszewski, Tansy	The Flyway Concept and Assessment of OWF Impacts on Migratory Marine Fauna Secor, David	Intraspecific variation in native Rainbow Trout: a comparison of morphologi-c al and genetic divers Breech, Tyler	Comparing limits with reality: how thermal sensitivity of anadromous juvenile alewife and bluebac Guo, Lian	Integrative Assessment of the Quality of Shallow Tributary Forage Habitats for Striped Bass in Ch Ogburn, Matthew		A flooded future for river chub? Predicted effects of climate change and urbanization on nesting Kemp, Stanley J.	Southeast Aquatic Barrier Inventory and Prioritization Tool: Assessing Aquatic Habitat Fragmenta Hoenke, Kathleen	Thirty five years later: new research, management and policy as a result of the dreissenid mussel Bossenbroek, Jonathan	The curious case of stable isotopes in larval lampreys: Larval lamprey lipids are enriched in 13C Evans, Thomas	

			1							
								Chesapeake		
								Bay		
								introduced		
								species		
								control and		
								management		
2:40	Review of	Panel		Modeling fish	Striped Bass	Panel	2020 Fish	Overwinterin	Modeling	
2.40 PM		Discussion								
PIVI	habitat	Discussion		distributions	Predation	Discussion	Passage at the	g and	Juvenile Sea	
	requirements,			in an extreme	has Driven		Big Bar	spawning	Lamprey	
	distributions,			tidal	the		Landslide,	habitat use	Survival and	
	and			environment	Population		Fraser River,	by invasive	Migratory	
	protections of			using data	Dynamics of		British	Blue Catfish	Behavior with	
	cold water fish			from acoustic	Blueback		Columbia	in a tributary	New JSATS	
	species in			telemetry	Herring and		Bryan, Vince	of	Technology	
	Minn			Bangley,	American		, ,	Chesapeake	Haas, Taylor	
	Bahr, Derek			Charles	Shad			Bay	, . , .	
	54, 20.01			0.10.1103	Kahn,			Williams,		
					Desmond			Branson		
3:20	Davidanment	Panel	Comparing	When habitat	Desiriona		Dosign and			
PM	Development of dissolved		Comparing				Design and	Preliminary		
PIVI		Discussion	biodiversity	begets			Construction	Diet Analysis		
	oxygen,		indicators	habitat			of a	of the		
	temperature,		derived from	Jordaan,			Nature-Like	invasive		
	and nutrient		genetic and	Adrian			Fishway for	Flathead		
	thresholds to		non-genetic				the Saco River,	Catfish		
	protect cold		information				Maine	(Pylodictis		
	water fish		to support				Nelson, Ralph	olivaris) in a		
	Bouchard, Will		pop					Pennsylvani		
			Mamoozadeh							
			, Nadya					Stark, Sydney		
3:40	Merging	Panel	Countering	Spatial			Effectiveness			
PM	Ecology,	Discussion	the Legacy of	habitat			of a			
	History, and		Erosion in	constraints of			nature-like			
	Law to		North	U.S.			fishway on a			
	Conserve		Mississippi	Northeast			large,			
	Brook Trout in		Streams	fishes vary			free-flowing			
	the Wild and		Faucheux,	across life			river in			
	I I		1 '	1						
	Scenic		Nicky	history stages			Montana, USA			
	Namekagon			Wang,			Anderson, Ian			
	River,			Verena						
	Shirey, Patrick									

4:00 PM	The Impact of Data Granularity on Temperature Gradient Modeling in Michigan's Streams Hayes, Daniel	Underwater video as a tool to quantify fish in complex coastal habitats Baker, Ronald			Evaluating fish passage and tailrace space use at a low-use low-head lock-and-dam Hershey, Henry	(Cancelled) Attempting to Balance Migratory Fish Passage & Invasive Species Management : The Susquehanna	
4.20			1			River	
4:20 PM	Unique Challenges	Spatiotempor al Coherence					
1 101	and	of Aggregate					
	Approaches to	Biomass					
	Conserving	Ecosystem					
	Temperature	Indicators in					
	in Montana's	the					
	Coldwater	Mid-Atlantic					
	Streams	Bight, USA					
	Fortman,	Gartland,					
4:40	<i>Kristy</i> Water	James Association					
4.40 PM	Temperature	of fishes and					
1 101	Investigations	macro					
	and	invertebrates					
	Collaborations	to sand					
	of Penobscot	features in					
	Indian Nation	the New York					
	-Protecting	Bight					
	Water	Grothues,					
	Kusnierz,	Thomas					
5:00	Daniel	Implications	+				
PM		of the					
		Misalignment					
		of Manage-					
		ment and					
		Biological					
		Units in					
		Understandin					
		g Atlantic					
		cod					
		Linner, Robyn					

5:20			The				
PM			Importance				
			of Fine-Scale				
			Data in				
			Identifying				
			Suitable				
			Habitat for				
			Atlantic cod				
			Linner, Robyn				

	Johnson A Room, Hilton	Johnson B Room, Hilton	Latrobe Room, Hilton	Peale A, Hilton	Peale B, Hilton	Peale C, Hilton	Promenade, Marriott	Ruth Room, Hilton	Stadium 1 Room, Marriott	Stadium 2 Room, Marriott	Stadium 3 Room, Marriott	Stadium 4 Room, Marriott	Stadium 5 Room, Marriott	University 1, Marriott	University 2, Marriott
	Interactions between offshore wind, fisheries, and fisheries resources	Contributed Papers: Freshwater fish ecology	Contributed Papers: Salmonid conservation	Ecological forecasting: bridging fish, ecosystems, weather, water, climate and communities	Back to the future of reservoir science and manage- ment: What have we learned in 50 years?	Managing for a RADical future: resisting, accepting and directing ecosystem transform- ation	Climate informed fisheries management	Fish passage through the ages - historical approaches, current innovations, and future opportun- ities	Contributed Papers: Hatcheries and fish health	Contributed Papers: Sharks and migratory fishes	Beyond species detection - leveraging eDNA to inform fisheries management and conservation	Retrospective and horizon scans for fish genetics/ge- nomics	Diversity and Inclusion: a strategy to implement change for 2021 and beyond	Fisheries PEP talk - increasing diversity in our science	Ecological forecasting: bridging fish, ecosystems, weather, water, climate and communities
8:00 AM	Assessing economic impacts to the US commercial surfclam fishing industry from offshore wind ener Scheld, Andrew	Habitat associations of Blotchside Logperch (Percina burtoni) in the Little River, Tennessee and Cary, Joshua	Identifying the impacts of fine sediment and drought conditions on Brook Trout (Salvelinus fontin Briggs, Emilee	What is Ecological Forecasting? Allen, Laurie	Fish habitat issues in Iowa lakes versus reservoirs, and relationships with the fishery Krogman, Rebecca	Reservoir fisheries management is RAD! Resisting, accepting and directing riverine impoundment Engman, Augustin	Flatlined Flatfish? Status, Trends, and Fisheries Management of Southern Flounder in Texas. Geeslin, Dakus	Estimating Alewife Spawning Run Size By Incorporating Rates of Multi- Passage from PIT Tag Detecti McCartin, Kellie	What have we been stocking all these years? A genomic characterization of walleye strains in West Johnson, Andrew	Primed and Cued: Linking Interannual and Seasonal Flow Dynamics to the Spawning Migrations of Com Massie, Jordan	Introduction	MarineOmics: A new web resource for robust and reproducible genomic research in marine and aquati Silliman, Katherine	A Retrospective and Broad Review of Diversity and Inclusion Efforts in AFS Moffit, Christine	Keynote	
8:20 AM	Development of a fishery owned knowledge trust and demonstration of its use in the assessment of Manderson, John	Dynamics of Fish-Habitat Relationships in the North Platte River- Lake McConaughy Interface Cooke, Thyme	Wildfire and Native Trout Recovery in Arizona Beard, Zachary		Balancing ecosystem complexity and effective management: deriving and understanding discrete rese Conroy, Joseph	A RAD decision-making tool for walleye (Sander vitreus) management in Wisconsin Dassow, Colin	Reconciling conflicting relative abundance trends by accounting for changing ocean conditions Hansell, Alex	Downstream passage of American Eels (Anguilla rostrata) at a hydroelectric facility on the Roanok Krebs, Justin	Population genetic and stock enhancement tools for conservation of the overfished white seabass, Reiber, Ellen	Atlantic halibut migratory behavior and stock mixing across the northwest Atlantic Ransier, Krista	The effect of movement, energy use, and species identity on environmental DNA shedding of fish Thalinger, Bettina	Promises and challenges for reusing pre-existing genomic sequencing data for fisheries research a Lou, Runyang Nicolas	What White Guys Don't Know: Barriers to Minority Participation in Fisheries Lochmann, Steve	The PEP Model: Best Practices from the Woods Hole Partner- ship Education Program Jearld, Ambrose	AFS and AMS: Towards operationalize- ation of ecological forecasting Colton, Marie

8:40 AM	Considerations for Gear Standardization for Research and Monitoring in Offshore Lease Areas Pol, Mike	Field examination of altered stream temperatures on reproductive development of Johnny Darter Eth Adams, Catherine	Microhabitat and Energetics of Juvenile Chinook Salmon in a Simulated Floodplain Cech, Joe	Reversing What Time has Taken Away: Mother Nature's Experiment with Cove Connection in Harlan Cou Wuellner, Melissa	Conserving the Laurel Dace (Chrosomus saylori), a Federally Endangered Minnow Fix, Shawna	Comparative case studies of fisheries (re-)allocation processes under climate change Tokunaga, Kanae	Using Sensor Fish Transmitters as Proxies for Documenting Downstream Fish Passage Conditions at L Hugo, David		High retention duration of pop-off satellite archival tags with sheepshead (Archosargus probatoce Naisbett-Jones, Lewis	Integrating physiology and environmental dynamics to operationalize environmental DNA (eDNA) as a Yates, Matthew	Long-read genome resequencing ("LRG-seq") provides simultaneous estimation of SNPs, structural va Krabbenhoft, Trevor	Outdoors is for Everyone: Creating an Inclusive and Safe Space in our Society for LGTBQ+ Members Miles (she/her), Cassidy	Diversity, Inclusion & U.S. Aqua- culture Black, Imani	Ecological Forecasting Initiative: Building a Community of Practice Dietze, Michael
9:00 AM	Informing Wind Farm Layouts with AIS Data and Measured Trawl and Dredge Tracks Drew, Stephen	Development of a habitat model for an endemic leuciscid, the Sandhills Chub (Semotilus lumbee) Herigan, Garrett	Growth prior to ocean entry may provide a survival advantage to Columbia River Interior Spring Ch Norrie, Craig	Beyond the 100th Meridian: A Case Study of the Complex Mechanisms By Which Drought-induced Drawdo McLaren, John	Creating a Safe Operating Space for an Inland Recreational Fishery Embke, Holly	Simulating the impacts of climate change on blue crab (Callinectes sapidus) populations in New York Molina, Adelle	American eel passage through a small-scale fish-safe Restoration Hydro Turbine: Direct observatio Watson, Sterling	Anatomy of a Successful Paddlefish Restoration Effort: A Case Study of Oologah Lake and the Verdi Gary, Ryan	Where do Maine Atlantic Sturgeon go in the winter? Zydlewski, Joseph	Assessing the power of environmental DNA to predict Atlantic salmon (Salmo salar) population abun Morrison, Melissa	Whole genome screening for diagnostic markers can dramatically increase both the accuracy and spa Therkildsen, Nina	Terranaut Club: STEM and Nature Exploration for Girls+ Quinn, Danielle	Sea Grant Visioning & Actions to Incorporate Diversity, Equity and Inclusion Ebbin, Syma	Process-based forecasting of near-term range shifts in marine species Fredston, Alexa
9:20 AM												AFS Issues and Actions around DEI Penaluna, Brooke		Evolution and Advancements in Forecast Methodology for Alaskan Salmon Fisheries Cunningham, Curry
9:40 AM	The use of navigation simulators to gain experience operating in offshore wind farms Sarro, Chris	Complexity in mutualistic interactions between River chub and nest associates – Observations from Kemp, Mary	Using acoustic telemetry to characterize predation on Atlantic salmon smolts. Mensinger, Matthew	Is reservoir water elevation and habitat availability a linear relationship? Schriener, William	Managing Watersheds and Riverscapes for Aquatic Ecosystem Resiliency in a Rapidly Urbanizing Priv Birdsong, Timothy	Evaluating Alternative Harvest Control Rules for Gulf of Maine Cod in a Changing Climate Mazur, Mackenzie	Visualizing Success: The Importance of Visual Surveys for Evaluating and Developing Successful Ee Kiraly, Ian		Refining capture-recapture recruitment estimation methods for Atlantic Sturgeon in the Altamaha R Baker, Michael	Testing the waters for quantitative abundance: American Eels in the Bronx River Chin, Sam	Gene flow and spatial population structure of Brook Trout in a large headwater stream network in Harris, Audrey	Panel Discussion	Lessons Learned in Offering Same Program with a Different Delivery Scott Price, Onjalé	

10:0	Effective Stakeholder Engagement in Offshore Wind Energy	Toothy Filter Feeder? Evidence of Alligator Gar Feeding on	Genomic region associated with run- timing has		Does flow management result in less hospitable habitat for a	Developing a Framework for Managing Fish Species as they Cross	Consequences of False Assumptions when Projecting	Predicting outmigration of American Eels (Anguilla rostrata) to	First commercial trial of in-pond raceway system IPRS	Recruitment of American glass eels (Anguilla rostrata) to	eDNA as a tool for assessing fish population abundance	Using Genomics to Improve Stock Structure Resolution of	Panel Discu- ssion	Forecasting river herring bycatch in the Northeast US Roberts,
AM	Development: New York State's Fisheries Brunbauer, Morgan	Zooplankton Sallmann, Derek	similar haplotypes and phenotypic effects across th Willis, Stuart		parasite's intermediate host? Daley, Taylor	Political Boundaries Alofs, Karen	Habitat Suitability: A Caution of Forecasting u Hodgdon, Cameron	improve downstream passage surviv Manhard, Christopher	aquaculture in Bangladesh with Ctenopharyng Ehshan, Md. Amimul	northeast Florida: evidence for a decad Johnson, Eric	across inland lakes of a recreational fishery Spear, Michael	Lake Whitefish (Coregonus clupeaformis) i Shi, Yue		Kelsey
10:2 AM	0	Swimming performance and metabolism of four fish species under the flow and temperature regimes o Stell, Ehlana			Going with the Flow: Past, Present, and Future of Reservoir Fish Escapement Cope, William		Impact of Marine Heatwaves on the Spatiotem- poral Distributions of U.S. Pelagic Fishing Fleets Farchadi, Nima	Stress Less? Comparing Stress in Fish After Bypass Pipe vs. Vehicle Transport Passage	Offshore Marine Aquaculture: A Farmer Perspective Zajicek, Paul		Advancing monitoring and management of mid-Atlantic Alosine fishes with eDNA analysis Fowler, Chelsea	A GT-seq panel creates new opportunities for walleye management in the Great Lakes and beyond Euclide, Peter	Panel Discus- sion	Creating a distribution model of invasive rusty crayfish (Faxonius rusticus) in Michigan streams Homan, Robert
				Stakeholder perceptions of fisheries management		Forage fish omics								
1:20 PM	Panel Discussion: The role of environmental and fisheries efforts during the pre- development stag Brunbauer, Morgan	Habitat Use of Three Forage Fishes across Six Reaches of the Mississippi and Illinois Rivers Valentine, Shaley	Hatch timing of two subarctic salmonids in a stream network estimated by otolith increments Fitzgerald, Kevin	Comparing social data to ecological models: environmental factors affecting the North Carolina sh Farquhar, Samantha	Can a river- reservoir interface serve as nursery habitat for riverine fishes? Smith, Nathan	Population genomic structure of Great Lakes ciscoes (Coregonus spp.) using low-coverage whole gen Backenstose, Nathan	Northeast Climate Integrated Modeling to Meet Ocean Decision Challenges Kerr, Lisa	Eel River of Northern Indiana: Ecological Restoration Through Conservation Partnerships Sweeten, Jerry	Design Features of Water Harvesting Structures to Accommodate Fish Farming: Views and Reviews Muthiah, Muruganan- dam	Scalloped hammerhead sharks have more complex migratory routes than expected Amezcua, Felipe	Towards absolute abundance: applying a likelihood- based framework to enumerate the number of cont	Failure of Phenotypic Markers to Accurately Identify Black Bass Species and Associated Hybrids in Lewis, Matt		

											Contributed Papers: Fish genetics		
1:40 PM	A test of a generalized, optimal habitat selection model for drift-feeding fishes: brook charr Sliger, Ridge		The (En)Tangled Web They Weave: Stakeholder Perception of the Large Whale Take Reduction Process Ohnemus, Kimberly	Determining Lake Characteris- tics for Expanding the Florida Bass Stocking Program in Arkansas Buckingham, Jeffrey	Comparative genomics and microbiomes of a high value forage fish, Pacific chub mackerel, Scomber	Managing Menhaden: How Ecosystem Models Can be Used to Incorporate Climate and Ecology in Forage Grezlik, Maxwell	The effect of annual variability on passage standards set through population modeling O'Malley, Betsy	Warm Water Aquaculture in a Cold Water State Shields, Robert	Demographics, survivorship and post- released behavior of prohibited sharks captured in the land-b Dunton, Keith	Estimating the genetic diversity of Pacific salmon and trout using multigene eDNA metabarcoding Weitemier, Kevin	Chesapeake Bay Barcode Initiative (CBBI): The First Comprehensive Genetic Library for Fish of the Aguilar, Robert		
2:00 PM	Theoretical models as spatial proxies for stream fish metacommunities in a fragmented stream network Yancy, Lauren	A Guide to Assessing Native Fish Conservation Translocations Using Two Case Studies in Yellowston Puchany, Andriana	Homeward Bound: Returning Atlantic Salmon to Maine rivers using aquaculture Flye, Melissa	Survival and Dispersal Patterns for Stocked Age- 0 and Adult Striped Bass in Bull Shoals Reservoir Boehm, Hadley	Polygenic discrimin- ation of migratory phenotypes in the critically endangered Delta Smelt Campbell, Matthew	Something strange in the neighborhood: The potential roles of ecosystem and management changes in Wiedenmann, John	Updating the consensus on fishway efficiency: a meta-analysis Hershey, Henry	The potential of Pangasius catfish, Pangasian-odon hypophth-almus, production inpond raceway syste Ehshan, Md. Amimul			A Genetic Snapshot of Stocking: The Ontonagon River Lake Sturgeon Project Akers, Mary	Panel Discussion	
										Fishing for a molecule - the practical value of eDNA monitoring for invasive species			
2:20 PM	The Varied Roles of Small Fish as Mesopredators in Lake Food Webs Airey, Montana	Evaluating factors affecting Brook Trout abundance in Central Appalachian headwater streams using Schwinghamer, Christopher		Assessing Hydrilla Spread and Subsequent Impacts on Sportfish Communities in Lake Sinclair, Georgia Glomb, Jackson		Using spatiotemporal models and changes in sea surface temperature at varying spatiotemporal scal Denson, LaTreese	Alosine Restoration: Priorities and Challenges in the Delaware River Basin DeSalvo, Lyndon	Comparisons of Tissues for the Detection of Renibacterium salmoninarum in Cutthroat Trout Riepe, Tawni	Niche partitioning and trophodynamics in elasmobranch and teleost fishes in the British Indian Ocean Carlisle, Aaron	Agency Preferences to the Use of eDNA Monitoring for Aquatic Invasive Species Love, Joseph	Linkage map of Shovelnose Sturgeon (Scaphirhyn- chus platorynchus) haploids aids marker development Flamio, Richard		

2:40 PM	Panel Discussion		Modeling Synchrony in Black Bass Angler Activity and Management Actions Across Tennessee Reservoirs Hoogakker, Frederick	Asynchrony, tradeoffs, and climate drivers of lifetime demographic rates for alternative juvenile Sorel, Mark	Stakeholder Partnerships for Aquatic Connectivity - Capacity Building and Lessons Learned Shelton, James	Non-Lethal Detection of the Invasive Swimbladder Parasite Anguillicola crassus in American Eels (Lavoie, Danielle		Potential Factors Affecting Successful Detection of Target Species eDNA – Some Lessons Learned fr Riley, Jacob	Phylogeog- raphy and fitness consequences of admixture in the Smallmouth Bass (Micropterus dolomieu) Gunn, Joe		
PM	Discussion										
3:20 PM	Panel Discussion	Framework to assess the impact of investments in US fisheries innovation Redding, Stephen	Exploring the use of price indices to adjust angler expenditure profiles over time Hunt, Kevin	Ocean temperature and food web quality influence rockfish body condition Rosemond, Claire	HYDRAULIC IMPACT ON FISH MIGRATION IN SARIAKANDHI FISH PASS OF BANGLADESH. Kumar Ghosh, Bijoy	Laser Diffraction Technique in Fisheries research Jaleeli, Kaleem Ahmed	Species distribution models reveal habitat use, temporal changes, and knowledge gaps for basking McInturf, Alexandra	Opportunities and challenges in combining citizen science and environmental DNA for surveillance Larson, Eric	Using genetic parentage to validate scale ages in wild Pacific salmon McPhee, Megan		
3:40 PM		AGE AND GROWTH OF THREE IMPORTANT COMMERC- IALLY HARVESTED FISHES IN TENNESSEE: SKIPJACK HERRING, S Wesley, Victor		Changing climate associated with the range-wide decline of an estuarine finfish Erickson, Kenneth			Metal heads: Physiological and behavioral effects of organic mercury on a small elasmobranch, Mus Sabando Plaza, Maria A				
4:00 PM		Crappie population dynamics and harvest regulations in Kansas reservoirs Miazga, James		A Reason to Feel Blue? Evaluating the Impacts of Environmental Stress and Bioactive Estrogen on t Rocco, Alex			Patterns of Residency and Space Use of Arctic Skates (Amblyraja hyperborea) Across a Developing A Bradley, Jarius				

	aspec repro	mating ects of roductive ogy for a						
4:20 PM	non-r Flath Catfis popu the	-native head iish ulation in 						
	Pellet	etier, Claire						

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	Climate- resilient fishing communities	Highlighting Fisheries Successes along the Atlantic Coast	Contributed Papers: Freshwater fish ecology	Fish Welfare	Contributed Papers: Freshwater fishery management	Shifting angler dynamics in relation to the COVID-19 pandemic	The craft of communicating climate change: climate ambassador perspectives	Fish passage through the ages - historical approaches, current innovations, and future opportunities	Contributed Papers: Hatcheries and fish health	Contributed Papers: Fish genetics	Ecological forecasting: bridging fish, ecosystems, weather, water, climate and communities
8:00 AM	Adapting to climate-driven species shifts: a typology of fishermen's behavioral responses and ada Smith, Sarah		A Unified Model of Walleye Recruitment Krabbenhoft, Corey		Big fish in a little tank: Blue Catfish stress in livewells Kramer, Nick	COVID-19 influences on US recreational angler behavior	AFS Climate Ambassador Program: Shaping the Climate Narrative Winters, Drue	High-speed Video Analysis of Simulated Turbine Blade Strikes to Determine the Effects of Fish Bod Amaral, Stephen	Effects of ecologically relevant levels of glochidia infestation on metabolic rate and hypoxia to Horne, Lindsay	Low coverage whole genome sequencing reveals molecular markers for spawning season and sex identi	Habitat Modeling for Invasive Lionfish in the Gulf of Mexico Using a Bioenergetics- Based Growth M Bauer, Hanna
8:20 AM	Encouraging More Climate- Resilient Commercial Fishing Ports in New Jersey Zemeckis, Douglas	More than just fish ages: Massachusetts Division of Marine Fisheries age and growth project Elzey, Scott	Recruitment of Smallmouth Buffalo in the Upper Mississippi River System Maxson, Kristopher		An assessment of age, growth, and otolith chemistry for White Catfish in the Penobscot River, Maine Whittum, Kory	Angler compliance with in Rockfish Conservation Areas in British Columbia, Canada, in response to Venturelli, Paul	My "And, But, Therefore" Journey: Exploring A Framework for Clear, Compelling Communication Guo, Lian	DOCUMENTED IMPROVEMENTS IN FISH PASSAGE IN THE LOWER PATAPSCO RIVER FOLLOWING BLOEDE DAM REMOVAL Harbold, William	Using dispersal data to optimize egg planting strategies for Atlantic Salmon Atkinson, Ernest	Highly variable supergenes dominate genetic patterns of Atlantic Cod in the northwestern Atlantic Pavey, Scott	Cyberinfrastructure for Near Real-time Water Quality Forecasting in Lakes and Reservoirs Figueiredo, Renato
								Contributed Papers: Fish passage			
8:40 AM	A social- ecological examination of seasonal dynamics in the Maine lobster fishery Fitting, Emily	Juvenile finfish relative abundance surveys in Maryland's Coastal Bays Weedon, Craig	Investigating Recruitment Patterns Among Upper Mississippi River Fishes Muehler, Aaron		Investigation of the Efficacy of Electrified Benthic Trawl on Young of Year Ictalurids in Varying Shaffer, Cassy	Identifying motivations and barriers for Texas anglers who first purchased a license during the C Schlechte, Warren	Storytime for Scientists Donovan, Shaun	Assessment of Atlantic Salmon Smolt Injuries during Emigration from 5 Maine Rivers from 1998-2019 Gerrior, Jack	Egg quality and the timing of broodstock diet shifts in southern flounder (Paralichthys lethostigma) Bailey, Hunter	Complex introgression among three diverged largemouth bass lineages Silliman, Katherine	Climate-ready and resilient fisheries: using satellite data to conserve and manage life in the Farchadi, Nima

	Mind the	The Maine-	Historical	The Cociality	Catch and Size	Changes in	All the Small	Exploring	Gonadal	Building	Integrating Marine
	trap: climate		French	The Sociality of Atlantic	Structure Comparison	Changes in demographics	Things: The		differentiation	Collections	and Coastal
	resilience	New			•		U	movement	and effects of		Natural Capital into
		Hampshire	Broad River:	Sturgeon and	of Fishes and Turtles in	and distribution	Importance of	patterns		and Genomic	'
0.00	and risks of	Inshore Trawl	What we	Sand Tiger in	Hoop Nets Using Three	of Wisconsin	Communicating	Chavez,	estradiol-17β	Resources for	Ecological
9:00	rigidity in	Survey:	lost, how we	Dynamic Bay	Different Baits	anglers during	About Plankton	Martinique	on the	Conservation	Forecasting:
AM	Iceland's	Twenty-one	lost it, and	Environments	Schaick, Samuel	the COVID-19	for Fisheries		survival,	of Imperiled	Challenges and
	fisheries	years of data	how to get it	Roose, Robert		pandemic	Science		growth, and	Fishes	Opport
	Mason, Julia	collection to	back			Trudeau, Ashley	Burns, Corinne		sex reversal	Turner,	Rouleau, Tracy
		support scie	Etchison,						of	Thomas	
			Luke						Teal, Chad		
		Peconic Bay	Floodplain	In-pond	Seasonal Movement	COVID-19	Using art to	Dam Removal in		Comparison of	
		Trawl Survey –	trophic	raceway	Patterns and Use of	Pandemic	inspire wonder,	3D: Application		environmental	
		How Federal	subsidies in	system	Thermal Refuge for	influences on	introspection	of Stage 0 Design		DNA and	
		Aid Supports	a modified	technology	Muskellunge (Esox	Iowa fishing	and	to Dam Removal		snorkel	
		Projects that	river	improves	masquinongy) in the	license sales	conservation	Wildman, Laura		surveys for	
9:40		Improve	network:	production,	no	Kopaska, Jeffery	action			monitoring	
AM		Fisheries	Managed	growth,	Henesy, Joshua		Killeen, Helen			fish	
		Sustainabilit	foodscapes	survival and						distributions	
		Nunnenkamp,	of the	profile of						in rivers	
		Paul	future?	fatty acid						Shaffer, Jason	
			Ogaz, Mollie	Fatima,						,	
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		Long-term		Assessment	Quantifying	Making science	Incorporating	A genetic		Development	
		Monitoring of		of	Muskellunge Catch-	and research	land-based	evaluation of		of an	
		American		production,	and-Release Mortality	relevant for	knowledge into	dam impacts on		Environmental	
		Shad, Alewife,		growth,	in Stonewall Jackson	effective	the climate	Sauger (Sander		DNA (eDNA)	
		and Blueback		profile of	Lake	fisheries	change	canadensis)		Assay to	
		Herring in the		amino acids	Jenkins, Peter	management:	discussion	movement		Delineate the	
10:00		Virginian		and fatty	,	Three case	Weinstein,	patterns in the		Distribution of	
AM		Tributaries		acids in		studies from	Spencer	Arkans		the Imperiled	
		McGrath,		Tilapia		Morley,		Jonagan, Emily		S	
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10:20 AM	Striped Bass (Morone saxatilis): Long Term Monitoring and Management of New York's State	Presence of Statin and Beta-blocking Agents in West Virginia Surface Waters and sub-lethal Impact	Distribution and movements of catostomids in a river-reservoir complex and susceptibility to tour ZENTNER, DOUGLAS	Fisheries and Aquaculture Biodiversity in India: Economic Potentials and Environmental Concerns Muthiah,	The North Atlantic right whale and changing ocean conditions Baumwell, Leah	Bigmouth Buffalo Movement and Habitat Overlap with Paddlefish and Bigheaded Carp Sea, Bryan		
	Saltwate Best, Jessica	Kingsbury, Joseph Shifting a		Muruganandam Contributed		Getting It Right:		
		paradigm Whitewater Parks and Biota		Papers: Stakeholder engagement		Advancing Successful Supplementation for Recovery, Rec, and Restoration		
1:20 PM	Artificial Reefs of Delaware – we built them, did they come? Newlin, Scott	Keynote	A meta-analysis of shoreline angling metrics in large impoundment/tailwater systems in Kansas Neely, Ben	Bank Anglers have opinions, too. Feltz, Jessica		An Assessment of Relaxed Selection in Hatchery Populations of Pink and Coho Salmon by Analysis of Reich, Alexandra		
1:40 PM		Whitewater River Parks - History and Design McLaughlin, Richard	Quantifying Catch-and- Release Mortality of James River, Virginia Muskellunge Bauerlien, Cory	Trust in Fisheries Science: Hard to Earn, Easy to Lose, Impossible to Regain Rose, Kenneth				
2:00 PM	Applying Impervious Surface Thresholds to Guide Fish Habitat Management McGinty, Margaret	Designing Whitewater Parks for Passage of Nonsalmonid Fishes Ficke, Ashley	A literature review of the effectiveness of harvest regulations to meet size structure goals. Hill, Tommy			Evaluation of saltwater quarries in the Florida Keys (FL) for the semi-wild mariculture of Caribb Glover, Samantha		

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			How do the	Population Structure of			
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			Economic	Rainbow Trout Growth			
			Development	and Mortality on the			
			Aspects of	Beaver Tailwater			
			Ecosystem	(White River) in			
3:40			Restoration	Arkansas			
9.40 PM			and	Cunningham, Connor			
FIVI			Whitewater	Cariffiligitatil, Colliloi			
			Project Vinner				
			Kinner,				
		1	Edward				

4:00 PM			Movement patterns of Striped Bass (Morone saxatilis) in a river- reservoir complex relative to ang Vaisvil, Alex	
4:20 PM		Panel Discussion	Population Assessment of a Threatened Fish Species Using Remotely Operated Vehicle Technology and Snyder, Blaine	