

Conference Schedule				
Thursday, January 2				
	Admirals	Navigator	Compass AB	Compass C
16:00-20:00	Registration (Conference Centre Lobby)			
16:00-18:00	Workshop: Science Communication: Beyond the Manuscript (Capitol Room) Data Science Workshop (Academy Room)			
18:00-21:00	Welcome Social			

Friday, January 3

	Admirals	Navigator	Compass AB	Compass C
08:30-10:00	Registration (Conference Centre Lobby)			
09:00-09:15	Welcome			
09:15-10:15	J.C. Stevenson Memorial Lecture: Mark Poesch			
10:15-10:45	Nutrition Break (Foyer)			
10:45-11:00	AFS President: Scott Bonar			
11:00-12:00	F.H. Rigler Memorial Lecture: Brian Cumming			
12:00-13:30	Poster set-up/Lunch (on your own)			
		CCFFR: Genomics and eDNA applications in fisheries and conservation	SCL: Temporal Dynamics in Aquatic Ecosystems	Reproduction and Life Histories
13:30-13:45		GEN-FISH: Genomic Network for Fish Identification, Stress and Health. Daniel Heath	A paleoenvironmental study tracking eutrophication, metal pollution, and climate change in Niven Lake (NT), Yellowknife's first sewage lagoon. Emily Stewart	Widespread decreases in northwest Atlantic monkfish (<i>Lophius americanus</i>) size structure. Julie Charbonneau
13:45-14:00		The replicability and reliability of eDNA applications to monitor aquatic biodiversity. Jori B Harrison	Reconstructing long-term ecological change in two highly degraded Lake Ontario (Canada) coastal wetlands. Grace N Hoskin	Investigating Atlantic tomcod (<i>Microgadus tomcod</i>) dietary habits and coastal migration into spawning habitat within Minas Basin, Nova Scotia. Lindsay Carroll

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Friday, January 3				
	Admirals	Navigator	Compass AB	Compass C
14:00-14:15		Experimental harvesting of a socio-economically important fish species to reveal utility of eDNA to monitor abundance in harvested fisheries populations. Matthew Yates	Recovery dynamics of industrially damaged lake ecosystems (Sudbury) in response to change at multiple scales. John Gunn	Accounting for evolution in fisheries management: no ordinary fish tale. Manuelle Beaudry-Sylvestre
14:15-14:30		Evolutionary and demographic history of introduced brook trout in national park alpine lakes. Brent Brookes	Seasonal dynamics of fish community isotopic niches in natural and constructed fish habitats. Karling Roberts	Does the complexity and variability of early rearing environment influence responses to novel environmental situations in brook charr (<i>Salvelinus fontinalis</i>)? Melissa Goodwin
14:30-14:45		Exploring fish microbial communities; opening the fish microbial black box. Javad Sadeghi	Seasonal variation in CO ₂ , CH ₄ , and N ₂ O emissions from small farm reservoirs in the northern Great Plains. Sydney Emmons	Combined effects of maternal traits and spring warming patterns on spawning success of walleye. Sara Lehman
14:45-15:00			Assessing the impacts of Dorset Palaeoeskimo on freshwater ecosystems at Port au Choix, Newfoundland using paleolimnology. Kristen Coleman	Aspects of Thermal Acclimation in Juvenile Brook Trout (<i>Salvelinus Fontinalis</i>). Theresa Mackey
15:00-15:30	Nutrition Break			
		CCFFR: Genomics and eDNA applications in fisheries and conservation	SCL: Temporal Dynamics in Aquatic Ecosystems	Telemetry/Tagging/Passage

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Friday, January 3				
	Admirals	Navigator	Compass AB	Compass C
15:30-15:45		Assessing genomic vulnerability to climate change in Canada's northernmost freshwater fish, Arctic charr. Kara Layton	Paleolimnological assessment of eutrophication of southwest Nova Scotian lakes in relation to the local fur farming industry. Nell Libera	Sofishticated tracking: improved protocol for acoustic tagging of sensitive Clupeid fishes, and application in investigating postspawning migration of Alewife (<i>Alosa pseudoharengus</i>) in Minas Basin, Bay of Fundy. Elizabetha Tsitrin
15:45-16:00		Genetic differentiation among sympatric resident and anadromous Arctic char (<i>Salvelinus alpinus</i>) in Labrador, Canada is largely non-parallel but for a few key genes. Sarah Salisbury	Using Midge Remains to Assess the Impacts of Mink Farming on Hypolimnetic Oxygen in Lakes from Southwestern Nova Scotia. Julia Campbell	A practical method to account for variation in detection range in acoustic telemetry arrays to accurately quantify the spatial ecology of aquatic animals. Jacob W Brownscombe
16:00-16:15		Chromosomal inversions in the Atlantic cod genome: implications for management of Canada's Northern cod stock.. Scott Pavey	Tracking past inputs from mink farms using lake sediment cores in southwestern Nova Scotia. Jules Blais	Current and emerging statistical techniques for aquatic telemetry data: A guide to analysing spatially discrete animal detections. Kim Whoriskey
16:15-16:30		Structural variation and polygenic divergence drive population structure in Atlantic halibut. Tony Kess		The American Fisheries Society Standard Methods for Sampling North American Freshwater Fishes Project Update. Scott A Bonar

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Friday, January 3				
	Admirals	Navigator	Compass AB	Compass C
16:30-16:45		Patterns of gene flow, morphological variation, and environmental associations in southern Newfoundland Atlantic Salmon (<i>Salmo salar</i>). Ben Perriman		Climbing the wall: Evaluation of American Eel Interactions with Low-Overhead Dams. Brandon Nilsen
16:45-17:00		Environmentally associated chromosomal structural variation influences fine-scale population structure of Atlantic salmon (<i>Salmo salar</i>). Beth Watson		Use of new (High Residency) and traditional (coded) acoustic tagging technology to predict if Atlantic Sturgeon (<i>Acipenser oxyrinchus</i> Mitchill, 1815) will spatially and temporally overlap with a tidal turbine test site in Minas Passage, Nova Scotia.. Jessie Lilly
17:00-19:00		CCFFR Meeting		
20:00-23:00	Student Social (Pacifico)			

Saturday, January 4

	Admirals	Navigator	Compass AB	Compass C
		CCFFR: Genomics and eDNA applications in fisheries and conservation	CCFFR: Shifting resource dynamics in rapidly-changing marine ecosystems	Gone Fishn'
09:00-10:15		Intergenerational transfer of maternal effects via DNA methylation in Chinook salmon. Clare Venney	Seasonal migrations and habitat use in the recovered stock of Atlantic halibut in the Gulf of St. Lawrence. Dominique Robert	Climate and the Black Swan in Arctic fish populations. Ross Tallman
09:15-09:30		Range-wide genetic assignment reveals long-distance migration in Atlantic salmon. Ian Bradbury	Arctic Salmon: Community-led initiatives monitor increasing salmon in the Canadian Arctic. Karen Dunmall	Physiological and behavioural consequences of ice angling in freshwater fishes. Caleb Hasler
09:30-09:45		Moving beyond single-SNP approaches for understanding the genetic basis of Atlantic salmon age-at-maturity. Marion Sinclair-Waters	Connectivity and migratory movements of Greenland Halibut from Greenland coast in Northwestern Atlantic. Laélien Bassi	Seasonal patterns in scallop fishery discards of Atlantic cod, haddock, and yellowtail flounder inform risk-based management decisions. Freya Keyser
09:45-10:00		Beyond hybridization: five years of genetic monitoring following a large escape of farmed salmon in southern Newfoundland indicates continued introgression. Melissa Holborn	The return of the Striped Bass in the St. Lawrence River: Habitat utilization and distribution range. Pascal Sirois	Physiological and behavioural effects of catch-and-release angling on freshwater drum across seasons. Jamie Card

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Saturday, January 4				
	Admirals	Navigator	Compass AB	Compass C
10:00-10:15			Light-hearted lobsters: using a novel methodology with free-ranging heart rate biologgers to assess the effect of light pollution on stress in Spiny Lobster (<i>Panulirus argus</i>). S Clay Steell	Gamefish movement drives homogenization of Ontario freshwater fish communities. Matthew Guzzo
10:15-10:45	Nutrition Break			
		SCL: Aquatic Invasive Species in Canada	CCFFR: Shifting resource dynamics in rapidly-changing marine ecosystems	Salmonid Ecology
10:45-11:00		Effects of wave exposure on the population dynamics of the invasive bryozoan <i>Membranipora membranacea</i> in the Eastern Shore Islands, Nova Scotia. Claire Attridge	Do regime shifts beget regime shifts? Cod, fishing, and the environment.. Jeffrey Hutchings	Improvement of Atlantic salmon post-stocking recruitment success and survival by induced neophobia training. Istvan Imre
11:00-11:15		Quantifying the relative effects of environmental conditions and kelp bed characteristics on the population dynamics of an invasive epiphytic bryozoan on a regional scale. Conrad Pratt	Rehatching the redfish-Calanus ecological interaction in the Gulf of St. Lawrence: the reliance of larval redfish on <i>Calanus</i> eggs. Corinne Burns	A quantitative review of density-dependence in salmonids: biological mechanisms, methodological biases, and management implications. Jean-Michel Matte

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Saturday, January 4				
	Admirals	Navigator	Compass AB	Compass C
11:15-11:30		Non-native chain pickerel and smallmouth bass integration and impacts in Maritimes freshwater food webs. Linda Campbell	Community size spectra provide indicators within recovering fisheries ecosystems on the Newfoundland and Labrador shelf. Kyle Krumsick	Extreme life-history variation in non-anadromous Atlantic salmon: adaptation or constraint? Jeffrey Hutchings
11:30-11:45		Ecological thresholds of the Chinese mystery snail (<i>Cipangopaludina chinensis</i>). Meghan Fraser		Does personality in hatchery Atlantic salmon predict metabolic rate and life history? Kathleen Church
11:45-13:30	Lunch (on your own)	SCL Meeting		
		CCFFR: Science for spatial planning in changing aquatic environments	SCL: Applying limnology to solve problems in the 21st century	Models and Such
13:30-13:45		Habitat quality modeling : A comparison of models based on fish densities from Snorkeling and Video Recording visual sampling. Cynthia Guéveneux-Julien	The role of submergent and emergent vegetation in mitigating water quality in urban stormwater management ponds. Alexandra Johnston	Assessing the impacts of threats to the survival of the Plains Sucker (<i>Pantosteus jordani</i>) in the Milk River. Taylor MacLeod
13:45-14:00		Implications of spatiotemporal variation in the distribution of Atlantic cod and Yellowtail flounder for management of time-area closures on Georges Bank. David Keith	Aquatic Ecosystem Senescence of Wetland Impoundments in the Upper Bay of Fundy. Jacob Demers	Restoration of Atlantic salmon in a crowded world: effects of interspecific and intercohort competition. Jim Grant

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	Admirals	Navigator	Compass AB	Compass C
14:00-14:15		Estimating benthic population abundances using trap fisheries data. Eric Pedersen	Landscape controls of water quality indicators to inform management of agricultural reservoirs. Kerri Finlay	Sand lance (<i>Ammodytes</i> spp) biomass and distribution on the Newfoundland Shelf. Scott Morrison
14:15-14:30		Simple metrics of ecological connectivity for application to the design of marine protected areas. Arieanna Balbar	Urban wastewater induce shift from suspended to benthic primary production in small eutrophic stream of the Northern Great Plains. Nathanael Bergbusch	Does use of habitat selection phenotypes increase the predictive power of fish habitat models? Emmanuelle Chrétien
14:30-14:45		A human impact metric to inform the spatial management of coastal ecosystems. Grace Murphy	Plankton communities in Lake Ontario coastal wetlands are structured by water quality conditions along an urban-agricultural land-use gradient. Eric Anderson	Long-term monitoring protocol for American Eel (<i>Anguilla rostrata</i>) based on high performance computing simulations of sampling effort. Judith Bjorndahl
14:45-15:00		Prioritizing spatial fisheries management using machine learning on diverse information sources to identify habitat function and conservation threats. Jacob W Brownscombe	Exploring salinization trends and drivers in prairie aquatic ecosystems. Matthew Bogard	Updated Bayesian surplus production modelling of an experimental giant red sea cucumber (<i>Parastichopus californicus</i>) fishery in British Columbia for the Kitasoo/Xai'xais Indigenous Group. Reid Steele
15:00-15:30	Nutrition Break			
15:00-16:00		CARS-AFS Meeting		

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Saturday, January 4				
	Admirals	Navigator	Compass AB	Compass C
15:30- 17:00	Poster Session			
18:00- 21:00	Banquet			

Sunday, January 5

	Admirals	Navigator	Compass AB	Compass C
		CCFFR: Science for spatial planning in changing aquatic environments	SCL: Applying limnology to solve problems in the 21st century	Novel Tools
09:00-09:15		Modelling Northwest Atlantic demersal fish and benthic invertebrate assemblages in support of marine protected area network planning. Ryan Stanley	Fire, ice, and peat: Assessing the impact of forest fire to lakes of the subarctic peatlands. Tom Pretty	Measuring scientific impact beyond citation count, a fisheries case study. Aliana Hellmuth
09:15-09:30		Borrowing from paleontology, art and engineering: presenting a novel method to create artificial habitats using 3D printing and casting techniques. Aneri Garg		Distinguishing natal habitat of Newfoundland Capelin (<i>Mallotus villosus</i>) using otolith microchemistry. Ashley Tripp
09:30-09:45		Seasonal mixing across jurisdictional lines between two populations of a freshwater piscivore. Graham Raby	Will zooplankton on the great plains be able to “keep up” with climate-driven salinity change? Mariam Elmarsafy	Drop-Camera Surveying: An Alternative Method of Data Collection for Improved Resource Management Within Sea Cucumber Fishing Areas. Danni Harper
09:45-10:00		Investigating migration patterns of Atlantic herring in light of environmental change: A case study for industry led science contributing to improved understanding of stock structure. Jenna Munden	Nutrient composition of Mayfly excretion across streams that vary in dissolved organic carbon (DOC). Marina Taskovic	Impact of seiches on assessment of fish species abundance in Lake Erie coastal wetlands.. Nathan Tuck

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Sunday, January 5				
	Admirals	Navigator	Compass AB	Compass C
10:00-10:15		Habitat mapping in support of sustainable management of benthic resources. Jessica A Sameoto	Nutritional co-limitation of Daphnia by phosphorus and calcium revealed through experimental nutrigenomics. Paul C Frost	A Canadian Case Study Of Using Mobile Technology To Provide A Scalable Alternative To Traditional Creel Surveys and Netting Surveys. Sean Simmons
10:15-10:30		Identifying habitat associations for fishes in Lake Winnipeg using large scale bathymetric and substrate data linked with fish telemetry data. Tyana Rudolfson	What influences the interannual variability of lake water chemistry in Arctic river delta lakes? Ryan Scott	Managing uncertainty and reproducibility in cryptic skate classification. Danielle Quinn
10:30-11:00	Nutrition Break			
		CCFFR: Science for spatial planning in changing aquatic environments		Pollution/Contaminants
11:00-11:15		Identifying corridors of connectivity using genomic estimates of migration and resistance pathways to inform Marine Protected Area network design in the Northwest Atlantic. Nick Jeffery		Reducing mercury concentration in Northern Pike in a small Subarctic lake using intensive fishing. Heather Dixon
11:15-11:30		Beyond the next horizon: an open dialogue on the future of marine spatial planning in Canada's oceans. Noreen Kelly		The Impact of Boat Noise on Freshwater Fishes. Katherine Fedoroff

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Sunday, January 5				
	Admirals	Navigator	Compass AB	Compass C
11:45- 12:00				Emergent insects as contaminant biovectors at historical gold mine sites. Molly LeBlanc

Poster Numbers		
Poster	Authors	Title
1	Bailey H Silver, Rod G Bradford, and Michael JW Stokesbury	Quantifying pigmentation and biological characteristics of <i>Anguilla rostrata</i> using image analysis software over migration period.
2	James Kho, M Lisette Delgado, Gregory McCracken, Jenna Munden, and Daniel E Ruzzante	<i>Clupea harengus</i> : Reciprocal transplant of spring and fall spawning herring.
3	Sebastian Theis, Mark Poesch, Dak de Kerckhove, and Cameron Stevens	Comparing fish populations in shallow northern boreal lakes using mobile hydro-acoustic surveys: Benefits and biases.
4	Victoria Van Mierlo and Mark Poesch	Assessing community concordance metrics for assessing anthropogenic land use effects on aquatic ecosystem integrity in the North Saskatchewan River.
5	Jonathan Fisher, Wade Hiscock, Chris Dawe, and Susan Fudge	Marine ecosystem surveys in the Pangnirtung region explore community-based fisheries options and characterize species-habitat distributions.
6	Lola Coussau, Dominique Robert, and Pascal Sirois	Studying redbfish stock dynamics in the Gulf of St-Lawrence using otolith microchemistry.
7	Marie-Pier Boulanger, Hugues Benoît, Arnault Le Bris, and Dominique Robert	Inferences on environmental associations and depth-specific behaviour of Atlantic halibut (<i>Hippoglossus hippoglossus</i>) in the Gulf of St. Lawrence using pop-up satellite archival tags.
8	Safouane Khamassi, Marie-Julie Roux, and Dominique Robert	Baited Remote Underwater Video (BRUV) to assess fish and invertebrate community structure in the Estuary and Gulf of St. Lawrence.
9	Sarah Brown-Vuillemin, Réjean Tremblay, Pascal Sirois, Denis Chabot, Louis Bernatchez, and Dominique Robert	Trophic ecology of redbfish (<i>Sebastes</i> sp.) to optimize resource management in the Gulf of St. Lawrence.
10	Ashley Watt, Ryland Corchis-Scott, Colin McFarlane, Trevor E Pitcher, and Chris C Wilson	Winter eDNA assessment of endangered Redside Dace (<i>Clinostomus elongatus</i>) in the Greater Toronto Area.
11	Karl Weise	Detecting Brook Trout (<i>Salvelinus fontinalis</i>) Seasonal Habitat Use in Haliburton County, ON Using Environmental DNA.
12	Samuel Prystupa, Gregory McCracken, Robert Perry, and Daniel E Ruzzante	Population Genetics Analyses of Yukon Arctic Grayling.
13	SJ Lehnert, T Kess, KKS Layton, P Bentzen, I Paterson, N Barson, MP Kent, S Lien, JB Dempson, and IR Bradbury	Divergent supergene explains age of seaward migration in multiple lineages of Atlantic salmon.
14	Sarah Kingsbury, Andrew Sinclair, Jason LeBlance, Trevor Avery, and Linda Campbell	Case study of Chinese mystery snail, <i>Cipangopaludina chinensis</i> , reveals new insights into gaps in freshwater quality monitoring programs in Nova Scotia.

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Poster Numbers		
Poster	Authors	Title
15	Evelien VanderKloet, Nikki Beauchamp, Megan Bailey, Joseph Beland, Rod Bradford, Lindsay Carroll, Shelley Denny, Gabrielle Deveau, Sara Iverson, Shannon Landovskis, Darren Porter, Michael Stokesbury, and Fred Whoriskey	Apognmatulti'k: Integrating Mi'kmaw, local, and Western knowledge to enhance aquatic stewardship in Nova Scotia, Canada.
16	Kayla Hamelin, Megan Bailey, and Jeff Hutchings	Novel approaches to strengthening assessments of data-poor fisheries and conservation-dependent species.
17	Gretchen L Lescord, Thomas A Johnston, Matthew Heerschap, Constance M O'Connor, F Meg Southee, Brian A Branfireun, and John M Gunn	Arsenic, chromium, and other elements of concern in fish from remote boreal lakes and rivers: drivers of variation and implications for subsistence consumption.
18	Jillian A Leonard and Edmund A Halfyard	Acid rain and salmon recovery: success and expansion of the West River Acid Rain Mitigation Project.
19	Omar S Taboun, Edmund A Halfyard, and Christina AD Semeniuk	Effects of acidification treatment on personality-dependent spatial ecology of migrating Atlantic salmon smolts.
20	Alex Di Lonardo and Joshua Kurek	Lake sediments help recognize the historical presence of a nuisance alga on Vancouver Island, British Columbia.
21	Anna Kramer, Joelle Young, and Marguerite A Xenopoulos	Using early warning indicators to predict critical transitions in a natural aquatic ecosystem.
22	Emily J Barrie, Gregory S Piorkowski, Suzanne E Tank, and Rolf D Vinebrooke	Assessing drivers of stream metabolism across gradients of nutrient enrichment in agriculturally affected ecoregions of Alberta.
23	Fielding Montgomery, A Weston, B Rutherford, and Eddie Halfyard	Integrated conservation planning for priority watersheds within the NS Southern Upland Priority Areas.
24	Gabrielle Deveau, Darren Porter, Joseph Beland, and Michael JW Stokesbury	Coastal residency and dietary habits of yellow American eel (<i>Anguilla rostrata</i>) in Minas Basin, Nova Scotia.
25	Daniela Notte, Glenn T Crossin, and David Hardie	Predation of Atlantic salmon smolts migrating out of the Stewiacke River, NS.
26	Graham Raby, Claire Doherty, Ali Mokdad, Trevor Pitcher, and Aaron Fisk	Maximum metabolic rate is underestimated when using a manual chase protocol in salmonids.
27	Morgan Anderson, Trevor Pitcher, and Christine Madliger.	Behavioural and physiological stress metrics in hatchery-reared and aquarium reared Lake Sturgeon..
28	Christine Campbell and Erin Stevens	Shifting zooplankton species composition in St. Pauls Inlet, a brackish lake, reflects wider ecosystem trends.
29	Jennifer Van de Vooren, Brianna Wyn, and Megan Cooley	Coordinated Aquatic Monitoring Program (CAMP): Long-term Aquatic Ecosystem Monitoring in Manitoba.

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Poster Numbers		
Poster	Authors	Title
30	Jerome Marty and the Volunteers of the Kings County Monitoring program.	Citizen science unveils long-term changes in lake functioning in Kings County, Nova Scotia.
31	Josh Kurek, Paul W MacKeigan, Sarah Veinot, Angella Mercer, and Karen A Kidd	Ecological legacy of DDT archived in lake sediments from eastern Canada.
32	Kristen Coleman, Josh Thienpont, and Jennifer Korosi	Permafrost thaw-mediated lake browning.
33	Lauren Muzak Ruff, Ian Spooner, Mark Mallory, Nic McLellan, Dewey Dunnington, and Julia Crews	A paleolimnological assessment of factors affecting metal deposition and productivity in upland hydroelectric reservoirs, Nova Scotia, Canada.
34	Derek Gray, Mariam Elmarsafy, Jasmina Vucic, Rachel Cohen, Mercedes Huynh, Thomas Pretty, and Matthew Teillet	Which physicochemical variables should zooplankton ecologists measure when they visit a lake?
35	Kayla Tasky, Mariam Elmarsafy, and Derek Gray	Could phenotypic plasticity help zooplankton adjust to climate-driven salinity changes in Great Plains' Lakes?
36	Marcus Rice, Catriona Jones, and Paul Frost	Calcium Stress in <i>Daphnia pulicaria</i> and exposure to predator-derived cues: Making a bad situation worse.
37	Sarah Ellen Johnston, Kerri Finlay, Mackenzie Metz, Robert GM Spencer, David E Butman, Robert Striegl, and Matthew J Bogard	The Chemical Composition of Zooplankton Mediated Dissolved Organic Matter Cycling.