

ICAIS 2024 PROGRAM GRID						
Saturday, May 11, 2024						
12:00-16:00	Optional: Guided motor coach tour to Peggy's Cove with Ambassadors					
Sunday, May 12, 2024						
12:00-16:00	Optional: Guided motor coach tour to Peggy's Cove with Ambassadors					
Convention Hall Pre-Function Area						
15:00-17:00	Registration check-in desk open.					
15:00-16:00	PowerPoint submission desk open.					
Monday, May 13, 2024						
Convention Hall Pre-Function Area						
07:30-17:00	Registration check-in desk open.					
07:30-16:00	PowerPoint submission desk open.					
Convention Hall C1-C2A						
08:30-08:35	Deborah Sparks, Emcee					
08:35-08:55	Welcome from Elder Ann LaBillois, Elder in Residence at Dalhousie University					
08:55-09:00	Welcome from David Burden, Vice President of the Invasive Species Centre Board of Directors					
09:00-09:05	Welcome from Steve Craig, MLA, Sackville, NS					
09:05-09:10	Welcome from Alice Aitken, Vice President Research, Dalhousie University					
09:10-09:15	Colin Henein, Transport Canada: Introduction of Hugh MacIsaac as Keynote Speaker					
09:15-10:00	Keynote address Thirty years of progress: from no policy to global ballast water standards Prof. Hugh MacIsaac, Canada Research Chair in Aquatic Invasive Species, University of Windsor, Canada					
10:00-10:10	Question and answer period					
Convention Hall C5						
10:10-10:40	Networking Break					
10:40-12:00	Room 101 Session A-1 Impacts on Ecosystems and Biodiversity: The Big Picture Session Chair: Sarah Kingsbury, Fisheries and Oceans Canada	Room 102 Session B-1 Policy and the Best Laid Plans Session Chair: David Burden, Invasive Species Centre	Room 103 Session C-1 Industry Adaptations: Mitigating the Impacts of AIS Session Chair: Kristin Elton, New Brunswick Invasive Species Council	Room 109 Session D-1 To E or not to E, that is the Question Session Chair: Sarah Stewart-Clark, Dalhousie University	Convention Hall C1-C2A Workshop E-1 The Future of Ballast Water Management: Latest Science on Treatment System Performance Session Chair: Benjamin Hayes, Transport Canada	10:30-12:00
10:40-11:00	#27 Predicting invader ecological impacts in a changing world: further development of key metrics Jaimie Dick, Queen's University Belfast, UK	#131 European Alien Species Information Network supporting European alien species policies Ana Cristina Cardoso, European Commission Joint Research Centre, Italy	#19 Novel systems for delivery of carbon dioxide to mitigate biofouling by dreissenid mussels Diane Waller, U.S. Geological Survey, USA	#230 Standardizing DNA-based methods for non-native species surveillance John Darling, U.S. Environmental Protection Agency, USA	#224 The future of ballast water management: setting the stage Colin Henein, Transport Canada, Canada	10:30-10:45
11:00-11:20	#26 Does non-native diversity mirror Earth's biodiversity? Elizabeta Briski, GEOMAR, Germany	#138 A revitalized Canadian action plan to address the threat of aquatic invasive species Tim Gingera, Fisheries and Oceans Canada, Canada	#109 Developing the evidence base for effective biosecurity of aquatic invaders within raw water transfers Zoe K. Cole, University of Leeds, UK	#112 Environmental DNA (eDNA): an invasive species early detection tool Colleen K. Keefer, U.S. Fish & Wildlife Service, USA	#137 Measuring efficacy of ballast water management systems in the Great Lakes and St. Lawrence River Sarah Bailey, Fisheries and Oceans Canada, Canada	10:45-11:00
11:20-11:40	#24 Economic impact disharmony in global biological invasions Ross Cuthbert, Queen's University Belfast, UK	Virtual #33 Aquatic invasive species regulations: lessons learned and exploring ways to improve their applicability and efficiency Julie Carpentier, Fisheries and Oceans Canada, Canada	Virtual #60 The story of green crab in Newfoundland Michael Piersiak, Fisheries and Oceans Canada, Canada	Virtual #113 Optimizing point of use eDNA protocols for aquatic invasive species Stephen Spear, U.S. Geological Survey, USA	#256 Biological testing of ships' ballast water indicates challenges for the implementation of the Ballast Water Management Okko Outinen, Finnish Environment Institute, Finland	11:00-11:15
11:40-12:00	#223 The faunal Ponto-Caspianization of central and western European waterways Ismael Soto Almena, University of South Bohemia in České Budějovice, Czechia	#274 Safeguarding marine ecosystems: a dialogue on offshore wind energy farms and invasive species prevention Sam Chan, Oregon State University, Sea Grant College Program, USA	Virtual #85 Banning live bait fish once and for all. The history of bait fish management in Québec, Canada Catherine Brisson-Bonenfant, Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs, Canada	#144 Integrative taxonomy as an essential part of detecting and monitoring non-indigenous species with DNA-based methods: examples from the Northeastern Atlantic and Mediterranean Flavia Nunes, Institut Français de Recherche pour l'Exploitation de la Mer (IFREMER), France	Virtual #257 The current status of compliance with discharge standards using voluntary observation ships in Japan Tokuo Omura, Laboratory of Aquatic Science Consultant Co., LTD., Japan	11:15-11:30
					Panel Discussion	11:30-12:00
Convention Hall C2B-C3-C4						
12:00-13:00	Networking Lunch					

13:00-14:40	Room 101 Session A-2 An Emerging Threat: Risks and Surveillance for Invasive Crayfishes Session Chair: Jeff Brinsmead, Ontario Ministry of Natural Resources and Forestry	Room 102 Session B-2 Risky Business I: Identify, Assess, Respond Session Chair: Jenna White, Invasive Species Centre	Room 103 Session C-2 Dreissenid Management: 35 Years of Experience Session Chair: Liana Hryniewicz, Invasive Species Centre	Room 109 Session D-2 To E or not to E, that is the Question Session Chair: Sarah Stewart-Clark, Dalhousie University	Convention Hall C1-C2A Workshop E-2 The Future of Ballast Water Management: Science to Inform Policy Session Chair: Sarah Bailey, Fisheries and Oceans Canada	13:00-14:40
13:00-13:20	#103 CrayCam – optimising remote underwater video for management of invasive crayfish Matthew Harwood, University of Leeds, UK	Virtual #177 Failed responses to successful invasions: aquatic invasive species in the Laurentian Great Lakes Nicholas Mandrak, University of Toronto Scarborough, Canada	#63 Assessing zebra (<i>Dreissena polymorpha</i>) and quagga (<i>D. rostriformis bugensis</i>) mussel ecological risk in Canadian freshwater ecosystems Andréa Weise, Fisheries and Oceans Canada, Canada	#205 Environmental DNA as a tool to detect an impending northern pike invasion in the anadromous segment of the Columbia River Blaine L. Parker, Columbia River Inter-Tribal Fish Commission, USA	#164 Improving effective and efficient regulation of ballast water risks, through global collaboration Sonia Gorgula, Australian Government Department of Agriculture, Fisheries and Forestry, Australia	13:00-13:15
13:20-13:40	#175 The real and potential impacts of invasive crayfishes in Ontario, Canada Premek Hamr, Independent Researcher, Canada	#107 A defensible and risk-based approach to develop aquatic invasive species watch lists for Canada Thomas W. Therriault, Fisheries and Oceans Canada, Canada	#119 Community science - a tool for aquatic invasive species monitoring Lisa K. Scott, Okanagan and Similkameen Invasive Species Society, Canada	#70 Use of eDNA as a detection tool for prioritizing invasive round gobies surveys in a Pennsylvania (USA) stream Casey Bradshaw-Wilson, Allegheny College, USA	#132 Simulated protist invasions in mesocosms inform ballast water discharge criteria Euan Reavie, University of Minnesota-Duluth, USA	13:15-13:30
13:40-14:00	Virtual #130 Habitat suitability of potential new invasive freshwater decapods in South America Mafalda Gama, Department of Landscape, Environment and Planning Marine and Environmental Sciences Centre (MARE)/Aquatic Research Network (ARNET), Institute for Research and Advanced Training (IIFA), University of Évora, Portugal	#88 Developing a watch list of marine invaders for Atlantic Canada's invasive species hotspot using horizon scanning Conrad Pratt, Fisheries and Oceans Canada, Canada	#156 Long term trends and relationships of quagga mussels and water quality parameters in a large subtropical reservoir Todd Tietjen, Southern Nevada Water Authority, USA	Virtual #227 Using eDNA to find marine macroalgae in two oceanic archipelagos: an early detection tool for non-indigenous species Ana Rodrigues, University of the Azores, Portugal	#45 Incorporation of colonization pressure into the propagule pressure-based global ballast water standard Marco R. Hernandez, University of Windsor, GLIER, Canada	13:30-13:45
14:00-14:20	#65 Introduction and range expansion of White River crayfish (<i>Procambarus acutus</i>) to in-land waters in Ontario Brook L. Schryer, Ontario Federation of Anglers and Hunters, Canada	#299 Aquatic invasions in a rapidly changing Arctic: predictions based on a pan-Arctic stacked ecological risk assessment Kimberly Howland, Arctic Region - Fisheries and Oceans Canada, Canada	#39 Responding to zebra mussel detection in Lake Témiscouata, Quebec : a case study Andréanne Demers, Fisheries and Oceans Canada, Canada	#247 Application of environmental DNA and quantitative PCR to detect the presence of four invasive crayfish species in Brussels waterbodies (Belgium) Ann Vanderheyden, Royal Belgian Institute on Natural Sciences, Belgium	#15 Shipping networks and invasion risks connecting to U.S. focal ports Zhaojun Wang, Smithsonian Environmental Research Center, USA	13:45-14:00
14:20-14:40	#151 Interactions between invasive red swamp and rusty crayfish in the Chicago Region Reuben Keller, Loyola University Chicago, USA	#167 Overlooked no more: discovering and monitoring of non-indigenous invasive species in Nova Scotia lakes and rivers Linda M. Campbell, Saint Mary's University, Canada	#69 Evaluating whether dreissenid mussel control can improve lake whitefish spawning success in the Great Lakes Samantha Tank, Great Lakes Commission, USA	#259 Navigating shallow waters: transit analysis in the Great Lakes now and in the future Matthew First, U.S. Naval Research Laboratory, USA		14:00-14:15
Convention Hall C5						
14:40-15:10	Networking Break					14:15-14:45

15:10-17:10	Room 101 Session A-3 Focusing on the Ecology and Management of Invasive Crayfishes and Gammarids Session Chair: Andréanne Demers, Fisheries and Oceans Canada	Room 102 Session B-3 Something's Fishy Session Chair: Liana Hryniewicz, Invasive Species Centre	Room 103 Session C-3 Human Dimensions: Communications and Attitudes Session Chair: Frances Lucy, Atlantic Technological University	Room 109 Session D-3 Detection and Protection Session Chair: Jenna White, Invasive Species Centre	Workshop E-3 The Future of Ballast Water Management: Solutions and Implementation Session Chair: Colin Henein, Transport Canada	15:00-17:00
15:10-15:30	#195 Attack of the clones: first occurrence and attempted eradication of marbled crayfish in North America Jeff K. Brinsmead, Ontario Ministry of Natural Resources and Forestry, Canada	#221 Lessons from the invasion front: integration of research and management of the lionfish invasion in Brazil Pedro Henrique Pereira, Reef Conservation Project, Brazil	#46 Invasive alien species: improvement of understanding and communication Frances Lucy, Atlantic Technological University, Ireland	#158 Design and implementation of an invasive species monitoring and management program in a Canadian Arctic port: evolution of a program and lessons learned Andrea Locke, WSP Canada Inc., Canada	Virtual #260 Pathway for BWM compliance checking Sahan Abeyssekara, Lloyd's Register, UK	15:00-15:15
15:30-15:50	Virtual #225 Native molluscs alleviate water quality impacts of invasive crayfish Hui Zhang, Hubei University of Technology, China	#1 Functional response metrics explain and predict high but differing ecological impacts of juvenile and adult lionfish Monica McCard, Liverpool John Moore University, UK	#58 Inclusive language in AIS communication - a workshop report El Lower, Michigan Sea Grant, USA	#231 The Great Lakes Invasives Sentinel Sites Network: preliminary analysis of data from multi-year biodiversity monitoring in Duluth Harbor Sarah Brown, U.S. Environmental Protection Agency, USA	#264 Leveraging crew training and familiarization with ballast water management systems Manoj Subramanian, International Chamber of Shipping, UK	15:15-15:30
15:50-16:10	#187 Amorous or ravenous Gammarus? Ecological impact assessments of pre-copulatory pairs of an invasive amphipod Ellen J. Dolan, Queen's University Belfast, UK	#8 Do lionfish have personality traits and does this predict impact? Monica McCard, Liverpool John Moore University, UK	#38 The DOSI assessment scheme Ismael Soto Almena, University of South Bohemia in České Budějovice, Czechia	#193 Chain pickerel monitoring and management at Kejimikujik National Park and National Historic Site Brandon Nilsen, Parks Canada, Canada	#261 Familiarization of crews, surveyors and port state control officers with ballast water management systems Mark Riggio, Simplify Ballast, USA	15:30-15:45
16:10-16:30	#124 Comparison of ecophysiological responses to metal contaminants by native and invasive Gammaridae Connor Wood, University of the West of Scotland, UK	#95 Invaders across the cityscape: can the level of urbanization modulate the invasive potential of the goldfish? Piata Marques, University of Toronto Scarborough, Canada	#196 Mobilizing boater action: survey insights and recommendations for overcoming barriers to aquatic invasive species prevention Sam Chan, Oregon State University, Sea Grant College Program, USA	#186 Results of pilot study on low-cost and practical approach to catch migrating Chinese mitten crabs Heleen Keirsebelik, Antwerp University, Belgium	#262 Evaluating possible solutions for technical challenges with the installation, operation, and maintenance of ballast water management systems Jad Mouawad, Mouawad Consulting AS, Norway	15:45-16:00
16:30-16:50		#267 The rise and thrall of goldfish in North America Melanie D. Massey, University of Toronto Scarborough, Canada	#72 More than just education: a behaviour change action program in Nova Scotia Ken Donnelly, Nova Scotia Invasive Species Council, Canada	#280 Northern oriental weatherfish (<i>Misgurnus bipartitus</i>): a new fish species on the European list of invasive species of Union concern? Rhea Maesele, INBO, Belgium	Virtual #263 Streamlining the adoption of lessons learned into BWMS with existing type approvals Marcie Merksamer, Ballastwater Equipment Manufacturers Association, USA	16:00-16:15
16:50-17:10		Virtual #121 The current distribution of non-native Nile tilapia <i>Oreochromis niloticus</i> (Linnaeus 1758) in the Limpopo and Mpumalanga Provinces: implications for the conservation of native Mozambique tilapia <i>O. mossambicus</i> (Peters 1852) Mandla L. Magoro, South African Institute for Aquatic Biodiversity, South Africa	Virtual #152 Stakeholder's awareness regarding aquatic invasive species Filipe Banha, Universidade de Evora, Portugal	Virtual #25 How much trapping effort is needed for early detection of European green crab? Timothy D. Counihan, U.S. Geological Survey, USA	#266 Ballast water compliance is possible: the last steps Lisa Drake, SGS, USA	16:15-16:30
					Panel Discussion	16:30-17:00
Convention Hall C5						
17:30-20:00	Poster Session & Networking Reception					

	Kiosk #1 Round 1: Kiosk Host: Sheri MacNeil, Nova Scotia Invasive Species Council Round 2: Kiosk Host: Sheri MacNeil, Nova Scotia Invasive Species Council	Kiosk #2 Round 1: Kiosk Host: Sarah Kingsbury, Fisheries and Oceans Canada Round 2: Kiosk Host: Theresa Henke, University of Iceland	Kiosk #3 Round 1 Kiosk Host: Paige Kuczsmarski, Alberta Invasive Species Council Round 2 Kiosk Host: El Lower, Michigan Sea Grant	Kiosk #4 Round 1 Kiosk Host: Mattias Johansson, University of the Bahamas Round 2: Kiosk Host: Rochelle Sturtevant, Michigan Sea Grant	Kiosk #5 - Student Posters Round 1 Kiosk Host: Ross Cuthbert, Queen's University Belfast Round 2 Kiosk Host: Jamie Bojko, Teesside University
17:30-17:37 19:15-19:22	#10 The power of WISPA: the benefits of a standardized survey and a centralized database to our Watercraft Inspection Steward Program (WISP) John Marino, New York Natural Heritage Program, USA	#200 Rapid, long-range movement and establishment of round goby in the Hudson River, NY confirmed through traditional fish sampling, eDNA, and otolith microchemistry Rich Pendleton, New York State Department of Environmental Conservation/Cornell University, USA	#68 Assessment of risk and risk-reducing measures related to dispersal of the invasive alien carpet tunicate <i>Didemnum vexillum</i> in Norway Martin Malmström, Norwegian Scientific Committee for Food and Environment, Norway	#141 LIFE INVASAQUA project: communicating invasive alien species in the Iberian Peninsula Pedro M. Anastácio, MARE/Universidade de Evora, Portugal	#7 Comparison of the biological control potential of <i>Cyrtobagous salviniae</i> (Coleoptera: Curculionidae) on <i>Salvinia molesta</i> and the closely related species <i>Salvinia nymphellula</i> : a mesocosm, and field study on the lower Volta River of Ghana Steven Awuni, Czech University of Life Sciences, Czechia
17:37-17:44 19:08-19:15	#13 Improving capabilities for invasive species response Leah Elwell, Conservation Collaborations, USA	#64 Recreational boating in Lake Témiscouata – an important vector for the spread of zebra mussels in Eastern Canada? Andréa Weise, Fisheries and Oceans Canada, Canada	#229 Validation of a mRNA-based approach for quantifying living microorganisms in ships' ballast water Vanessa Molina, Naval Research Laboratory, USA	#169 International development of ProcellaCOR (florpyrauxifen-benzyl) for aquatic plant management Mark Heilman, SePRO, USA	#20 Vegetation and invertebrate response after invasive <i>Phragmites australis</i> removal along a Great Lakes coastal wetland Meghan J.M. Ward, Trent University, Canada
17:44-17:51 19:01-19:08	#197 Aiding Dreissenid boat decontamination inspections with advances in environmental nucleic acid (eDNA) detection Sheena Feist, U.S. Army Corps of Engineers, ERDC, USA	#77 Adaptive management in action: advancing the Phragmites Adaptive Management Framework (PAMF) Samantha N. Tank, Great Lakes Commission, USA	#127 Aquatic invasive species horizon scan to develop a watchlist for Eastern Canada Rebecca S. Aucoin, Fisheries and Oceans Canada, Canada	#170 Southeast Alaska invasive green crab workshop Linda Shaw, National Marine Fisheries Service, Alaska Region, USA	#168 First report of red swamp crayfish in Canada found in Nova Scotia Madison M.M. Bond, St. Mary's University, Canada
17:51-17:58 18:54-19:01	#29 Great Lakes aquatic invasive species regional coordination and invasive aquatic plant control prioritization and needs assessment Ceci A. Weibert, Great Lakes Commission, USA	#78 Is the banded mystery snail (<i>Viviparus georgianus</i>) an intermediate host of the swimmer's itch parasite in Quebec? Jessica Goldsmit, Ministère de l'Environnement et de la Lutte contre les changements climatique, des Forêts, de la Faune et des Parcs, Canada	#273 Not so clear - the history of Dreissenid mussels in Northern Lake Superior Joe-Felix Bienentreu, Parks Canada, Canada	#50 Discovery, development, and deployment of microbial natural products for control of aquatic invasive species Pam Marrone, Invasive Species Corporation, USA	#91 Incorporating eDNA into routine watershed monitoring: Hudson River Collaborative eDNA Early Detection Program Ashley Morris, Water Resources Institute/New York State Department of Environmental Conservation, USA
17:58-18:05 18:47-18:54	#30 An interstate approach to aquatic invasive species early detection and rapid response Ceci A. Weibert, Great Lakes Commission, USA	#86 Sticking its nose into new places: the western tubenose goby expands its range towards Quebec, Canada Jessica Goldsmit, Ministère de l'Environnement, de la Lutte contre les Changements Climatiques, de la Faune et des Parcs, Canada	#294 Multiple perspectives on the emergence of the invasive colonial tunicate <i>Didemnum vexillum</i> Kott, 2002 in the western Bay of Fundy, Atlantic Canada Claire Goodwin, University of New Brunswick, HUSTSMAN Marine Science Centre, Canada	#289 Experimenting the influence of temperature and salinity on the potential distribution of the non-indigenous ascidian <i>Phallusia nigra</i> Noa Shankar, Tel-Aviv University, Israel	#104 A silent invader: population monitoring of the first invasive sea spider <i>Ammothea hilgendorfi</i> at the Belgian coast Louis Simon, University of Mons, Belgium
18:05-18:12 18:40-18:47	#34 Development of the aquatic invasive species (AIS) control license program for European green crab (EGC) in Newfoundland and Labrador, Canada Lynn Lush, Fisheries and Oceans Canada, Canada	#249 The Belgian barcoding facility for organisms and tissues of policy concern Ann Vanderheyden, Royal Belgian Institute of Natural Sciences, Belgium	#283 Maine's (USA) partnerships with governmental and non-governmental agencies as an integral part of Maine's successful plant and animal AIS programs John McPhedran, Maine Department of Environmental Protection, USA	#290 The uninvited hitchhiker - <i>Styela plicata</i> seasonal reproduction and distribution along the Israeli Mediterranean coasts Noa Shenkar, Tel-Aviv University, Israel	#278 51 Exotic species - creating the Lake Champlain Aquatic Nonindigenous Species Information System Tess O'Brien, University of Vermont Rubenstein School of Environment and Natural Resources, USA
18:12-18:19 18:33-18:40	#36 A report of suctorian ciliate epibionts on the invasive <i>Bythotrephes cederstroemi</i> (Schödler, 1877) in Canada Liudmila Aleaga Aguilera, Enviro-Responsible, Canada	#248 Morphological, acoustic and genetic identification of a reproducing population of the invasive African clawed frog <i>Xenopus laevis</i> (Anura, Pipidae) recently discovered in Belgium Ann Vanderheyden, Royal Belgian Institute of Natural Sciences, Belgium	#295 Altered resource use by threatened bull trout (<i>Salvelinus confluentus</i>) amid competition from two non-native salmonids Mark Poesch, University of Alberta, Renewable Resources, Canada	Virtual #140 Multispecies coexistence of invasive alien crayfish in the north-western Italian lakes Lyudmila Kamburska, National Research Council - Water Research Institute (CNR-IRSA), Italy	#102 Genome sequencing of the invasive mussel <i>Mytella charruana</i> Jacob Adams, Valdosta State University, USA
18:19-18:26 18:26-18:33					Virtual #232 Transdisciplinary characterization of bioinvasive salmon: media narratives, stakeholder perceptions, and policy implications Jenna Travers, Oregon State University, USA

Tuesday, May 14, 2024					
Convention Hall Pre-Function Area					
07:30-17:00	Registration check-in desk open.				
07:30-16:00	PowerPoint submission desk open.				
Convention Hall C1-C2A					
08:30-08:40	Morning announcements				
08:40-09:20	Indigenous research methodologies and ways of knowing as they relate to science, stewardship and relationships with other species Andrea Reid and Alexander Tahkwakin Duncan, Institute for the Oceans and Fisheries, University of British Columbia, Canada				
09:20-10:00	Progress towards genetic biocontrol of invasive carp Michael Smanski, University of Minnesota, USA				
Convention Hall C5					
10:00-10:30	Networking Break				
10:30-11:50	Room 101 Session A-4 Invasive Carp Response: A Collaborative Approach to Controlling Invasive Carp Session Chair: Ryan Young, U.S. Fish & Wildlife Service	Room 102 Session B-4 On the Move Session Chair: Olivier Morissette, Université du Québec à Chicoutimi	Room 103 Session C-4 Impacts and Human Dimensions Session Chair: Ana Cristina Cardoso, European Commission Joint Research Centre	Room 109 Session D-4 Reining 'Em in: Control of Persistent AIS Session Chair: Rebecca Aucoin, Fisheries and Oceans Canada	Convention Hall C1-C2A Workshop E-4 Where are we at with the BWM Convention? Session Chair: DI Barton, Australian Government Department of Agriculture, Fisheries and Forestry
10:30-10:50	#252 An update on Fisheries and Oceans Canada's grass carp early detection surveillance and response activities David Marson, Fisheries and Oceans Canada, Canada	#66 Crabs without borders: early documentation of a range expanding species in coastal North Carolina associated with restored and natural oyster reefs April Blakeslee, East Carolina University, USA	#277 Stakeholder perceptions of aquatic invasive species invasion stage and management in the Laurentian Great Lakes Gadfly Stratton, University of Toronto Scarborough, Canada	#199 Smallmouth bass in Cultus Lake, BC: using simulation modeling to assess suppression options for an invasive sportfish Amalis Riera, BC Ministry of Water, Land and Resource Stewardship, Canada	- Summary of Day 1 key discussion points - Convention Review: summary and update to now - Convention Review: Upcoming steps and timeline
10:50-11:10	#253 U.S. Geological Survey SpawnCast: interactive forecasts of invasive carp spawning conditions throughout the Great Lakes Basin Everett Lasher, U.S. Geological Survey, Central Midwest Water Science Center, USA	#101 Towards an evidence-based spatial prioritization of management efforts to counter a widespread amphibian invader Teun Everts, Research Institute for Nature and Forest, Belgium	Virtual #57 National survey among anglers in Belgium: towards the first awareness raising campaign on biosecurity Arnaud Jacobs, National Scientific Secretariat on Invasive Alien Species, Belgium	#171 Confronting acres of octocorals: investigation and dynamic removal efforts of persistent sessile aquatic invasive species in Joint Base Pearl Harbor Hickam, Hawaii Kevin Lino, Naval Facilities Engineering Systems Command (NAVFAC) Pacific, USA	- MEPC81 outcomes relevant to BW - Harmonization of BW Convention with other IMO regulations
11:10-11:30	#254 Assessment of bubble screens as a dispersal barrier to control the movement of drifting invasive grass carp (<i>Ctenopharyngodon idella</i>) eggs Henry Doyle, U.S. Geological Survey, Central Midwest Water Science Center, USA	#207 The freshwater fish Vimba and Danube Bream in The Netherlands Frank Collas, Radboud University, The Netherlands	Virtual #111 Hitchhikers in fish stockings: a case study from the Netherlands Agata A. Mrugala, Netherlands Food and Consumer Product Safety Authority, The Netherlands	#28 Are we able to stop invasive pink salmon in the North Atlantic? A first attempt to stop them in the mighty Tana river, Norway Roar Sandodden, Norwegian Veterinary Institute, Norway	
11:30-11:50	#255 Monitoring invasive carp across a density gradient in the Upper Mississippi River Wesley Bouska, U.S. Fish and Wildlife Service, La Crosse Fish and Wildlife Conservation Office, USA	#203 Salinity tolerance of round goby: informing expansion potential in the Hudson River Estuary Kelsey L. Alvarez del Castillo, Cornell University, Department of Natural Resources and the Environment, USA		#53 Handle me with care – gently sorting out invasive pink salmon in the world's most important Atlantic salmon river Pål Adolfsen, Norwegian Veterinary Institute, Norway	
Convention Hall C2B-C3-C4					
11:50-13:00	Networking Lunch				

13:00-14:40	Room 101 Session A-5 Invasive Carp Response: A Collaborative Approach to Controlling Invasive Carp Session Chair: David Marson, Fisheries and Oceans Canada	Room 102 Session B-5 On the Move Session Chair: Conrad Pratt, Fisheries and Oceans Canada	Room 103 Session C-5 PBS for AIS: Public Education and Outreach Session Chair: Andréanne Demers, Fisheries and Oceans Canada	Room 109 Session D-5 Death on the Beach: Controlling AIS with Piscicides Session Chair: Jason LeBlanc, Nova Scotia Fisheries and Aquaculture	Convention Hall C1-C2A Workshop E-5 Biofouling and In-Water Cleaning – what lessons can implementation of the BWM Convention provide? Session Chair: DI Barton, Australian Government Department of Agriculture, Fisheries and Forestry
13:00-13:20	#43 Using an angler targeted survey to inform education and outreach efforts on grass carp Prevention in Canada Liana C. Hryniewicz, Invasive Species Centre, Canada	#84 Identifying natural biogeographic barriers in support of aquatic invasive species management Claudio DiBacco, Fisheries and Oceans Canada, Canada	#14 Aquatic invasive species rapid response helps frame innovative outreach, engagement, and coordination in Pennsylvania: case studies for success Sarah Stahlman, Pennsylvania Sea Grant, USA	#40 Breaching the rotenone walls of the EU. Sweden leading by example on pumpkinseed, loach and carps Øystein Kielland, Norwegian Veterinary Institute, Norway	What science or policy lessons have we learned from Ballast Water that could inform the development of the biofouling requirements? Practical implications for ships in maintaining a low fouling rate
13:20-13:40	#142 Invasive carp underwater acoustic deterrent system at Mississippi River Lock 19 Marybeth K. Brey, U.S. Geological Survey, USA	#71 Range expansion of coastal marine non-indigenous species into thermal refuge habitat can be mediated by environmental variability in changing coastal environments John B. Lowen, Fisheries and Oceans Canada, Canada	#61 Let's talk aliens - the benefits of outreach and stakeholder engagement in invasion science Theresa Henke, University of Iceland, Iceland	#82 Piper Lake smallmouth bass (<i>Micropterus dolomieu</i>) eradication project: using piscicide to remove an invasive species from the headwaters of a Nova Scotia river system Colin F. Buhariwalla, Nova Scotia Department of Fisheries and Aquaculture, Canada	What should be expected of equipment and service providers? Fouled ships pose risks and so does cleaning them – how can science help?
13:40-14:00	#76 Underwater acoustic deterrent effects on invasive carp behavior downstream of a navigation lock Jessica C. Stanton, U.S. Geological Survey, USA	#149 Sighting based vector and pathway analyses for non-indigenous species in NW European marine waters Arjan Gittenberger, GiMaRIS, The Netherlands	#90 Illinois waterfowl hunter aquatic invasive species outreach needs assessment Greg Hitroth, Illinois-Indiana Sea Grant and Illinois Natural History Survey, USA	#226 Responding to aquatic invasive species: lessons from the Miramichi smallmouth bass project Nathan Wilbur, Atlantic Salmon Federation, Canada	
14:00-14:20	#150 Multi-modal deterrent effects on upstream passage of invasive carp and native species through a navigation lock Andrea Fritts, U.S. Geological Survey, USA	#135 GLANSIS - cryptogenic and range expansion species Rochelle Sturtevant, Michigan Sea Grant NOAA GLERL, USA	#31 Great Lakes AIS Landing Blitz Ceci Weibert, Great Lakes Commission, USA	#49 Path to eradication: a rapid response to an aquatic invasive species in Dobsons Lake, Guysborough County John MacMillan, Nova Scotia Department of Fisheries and Aquaculture, Canada	
14:20-14:40	#92 Fine scale movement of grass carp through a deterrent at a large riverine lock Janice L. Albers, U.S. Geological Survey, USA	#116 The impacts of introduced chain pickerel (<i>Esox niger</i>) on lake food web structure and the implications for species at risk: a comparative isotope analysis study Erin E. Francheville, Saint Mary's University, Canada			
Convention Hall C5					
14:40-15:10	Networking Break				

15:10-17:10	Room 101 Session A-6 Invasive Carp Response: A Collaborative Approach to Controlling Invasive Carp Session Chair: Marybeth Brey, U.S. Geological Survey	Room 102 Session B-6 On the Move Session Chair: Jason LeBlanc, Nova Scotia Department of Fisheries and Aquaculture	Room 103 Session C-6 What's in your Genes: Using Genomics to Understand Biological Invasions Session Chair: Matthew Neilson, U.S. Geological Survey	Room 109 Session D-6 News from Away: Regional Approaches to AIS Management Session Chair: Jenna White, Invasive Species Centre	Convention Hall C1-C2A Workshop E-6 BWMS Performance and Compliance – What do we need to do? Session Chair: Di Barton, Australian Government Department of Agriculture, Fisheries and Forestry
15:10-15:30	#268 Standardizing boat electrofishing: lessons learned from targeting grass carp in the Great Lakes Ryan T. Young, U.S. Fish & Wildlife Service, USA	#281 Fouling classes in relation to the risk of NIS introduction by commercial vessels Saa Kabuta, Rijkswaterstaat, Ministry of Infrastructure and Water Management, The Netherlands	#217 Insights into transcriptomic response of the Blue Mussel (<i>Mytilus edulis</i>) to tunicate fouling and fouling treatments Sarah Stewart-Clark, Dalhousie University, Canada	#296 Establishing the first stable isotope database of European freshwater ecosystems Phillip J. Haubrock, Senckenberg Research Institute and Natural History Museum, Germany	Additional testing requirements relative to CWQ Ongoing inspections – qualifications for testers?
15:30-15:50	#194 eDNA detection of non-indigenous black carp in the Mississippi River watershed Madeleine P. Malmfeldt, U.S. Army Corps of Engineers, ERDC, USA	#240 Optical approaches to quantify biofouling Scott Riley, Excet Inc., USA	#37 Species confirmation and population genetics of the non-native mystery snails <i>Heterogen japonica</i> and <i>Cipangopaludina chinensis</i> within the Eastern United States Daya Hall-Stratton, George Mason University, USA	#198 Quantifying the potential economic impact of zebra and quagga mussels in British Columbia Amalis Riera, BC Ministry of Water, Land, and Resource Stewardship, Canada	Ongoing inspections – electronic log books Ongoing inspections – frequency of testing, size group to test for, type of testing What happens to non-compliance data after 08SEP24?
15:50-16:10	Virtual #23 What do black carp (<i>Mylopharyngodon piceus</i>) eat? Can metabarcoding aid in the identification? Yer Lor, U.S. Geological Survey, USA	#180 Addressing AIS spread through canals in the Lake Champlain Basin Meg Modley, Lake Champlain Basin Program, USA	#172 Leech breach: <i>Helobdella europaea</i> recorded in Fiji: a first south-west Pacific island encounter Bindiya Rashni, University of the South Pacific, Fiji	#62 How AIS prevention aid invests in local communities across Minnesota, USA Douglas A. Jensen, Minnesota Department of Natural Resources, USA	Mechanisms for reporting to ship/Flag/BWMS manufacturer?
16:10-16:30	#211 A broken bottleneck enables invasion: will young-of-year survive overwinter under climate change? Erik K. Dean, University of Toronto Scarborough, Canada	#188 Round goby in the New York State Canal System: expansion rates and assessment of detection methods Meg Modley, U.S. Geological Survey, USA	#136 Investigating the population genetics of round goby (<i>Neogobius melanostomus</i>) in Lake Erie and its tributaries Adam M. Simpson, Pennsylvania State Erie, USA	#282 Test of acoustic trapping as a cost-effective method to mitigate round goby (<i>Neogobius melanostomus</i>) early invasion Vincent Médoc, ENES Bioacoustics Research Lab, University of Saint-Etienne, France	
16:30-16:50		Virtual #161 Euclimatch: versatile and quantitative Euclidean climate matching in R Justin Hubbard, University of Toronto Scarborough, Canada	#245 A novel gene silencing technology for harmful cyanobacterial bloom mitigation Ping Gong, U.S. Army Engineer Research and Development Center, USA	#279 Maine's (USA) partnerships with governmental and non-governmental agencies as an integral part of Maine's successful plant and animal AIS programs Denise Blanchette, Maine Department of Environmental Protection, USA	
19:00-21:00	Special Networking Event at Alexander Keith's Brewery				

Wednesday, May 15, 2024				
Convention Hall Pre-Function Area				
07:30-17:00	Registration check-in desk open			
07:30-16:00	PowerPoint submission desk open.			
Convention Hall C1-C2A				
08:30-08:40	Morning announcements			
08:40-09:20	Managing aquatic weed invasions in South Africa – innovations in biological control Julie Coetzee, Centre for Biological Control, Rhodes University and South African Institute for Aquatic Biodiversity, South Africa			
09:20-10:00	Parasites and biological invasions Jamie Bojko, Teesside University, UK			
10:00-10:10	Special Announcement			
Convention Hall C5				
10:10-10:40	Networking Break			
	Room 101 Session A-7	Room 102 Session B-7	Room 103 Session C-7	
10:40-11:40	March of the Invaders: Ecology and Spread of Aquatic Invasive Plants Session Chair: Colin Cassin, Invasive Species Centre	Double Trouble: Invasive Species as Disease Vectors Session Chair: Kristin Elton, New Brunswick Invasive Species Council	Gutsy Gobies: Little Fish – Big Impacts Session Chair: Andrea Weise, Fisheries and Oceans Canada	
10:40-11:00	#275 Expansion of the invasive hybrid cattail <i>Typha x glauca</i> into the Prairie Pothole Region Joanna Freeland, Trent University, Canada	#214 Invasive green crabs (<i>Carcinus maenas</i>) are vectors for pathogens of the American lobster (<i>Homarus americanus</i>) K. Fraser Clark, Dalhousie University, Canada	#54 A decade of Ponto-Caspian gobies monitoring: what have we learned? Hugo Verreycken, Research Institute for Nature and Forest, Belgium	
11:10-11:20	#271 The naturalization of fanwort (<i>Cabomba caroliniana</i>) in a Canadian Shield Lake in Ontario Nicholas A.P. Weissflog, Trent University, Canada	Virtual #191 The Chinese mitten crab <i>Eriocheir sinensis</i> is spreading microsporidian parasite <i>Hepatospora eriocheir</i> across Europe – could it be beneficial? Monika B. Normant-Saremba, University of Gdańsk, Poland	#87 Food-web impacts of invasive round goby on two species at risk: eastern sand darter and channel darter in the Nicolet River Jaclyn M. Hill, Fisheries and Oceans Canada, Canada	
11:20-11:40	#9 The second decade of hydrilla management in New York: adaptive management in action Catherine McGlynn, New York State Department of Environmental Conservation, USA	#74 Field surveys and comparative parasitology of freshwater native and invasive snails in Virginia Amy Fowler, George Mason University, USA	#47 Unlocking the secrets of a novel invader: otolith studies reveal migration patterns and longer settlement of eastern tubenose goby <i>Proterorhinus semipellucidus</i> (Kessler, 1877) in the Baltic Sea Katarina Kurina, University of Tartu Estonian Marine Institute, Estonia	
Convention Hall C2B-C3-C4				
11:40-13:00	Networking Lunch			
11:40-13:00	ICAIS 2024 Mentoring Lunch			

13:00-14:40	Room 101 Session A-8 Search and Destroy I: Surveillance for Aquatic Invasive Plants Session Chair: Colin Cassin, Invasive Species Centre	Room 102 Session B-8 Double Trouble: Invasive Species as Disease Vectors Session Chair: Fraser Clark, Dalhousie University	Room 103 Session C-8 Dreissenid Ecology: Little Mussel, Big Problems Session Chair: Andrew Drake, Fisheries and Oceans Canada	Room 109 Session D-8 Risky Business II: Predicting Future Invasions Session Chair: Jaclyn Hill, Fisheries and Oceans Canada
13:00-13:20	#190 The likelihood of sampling American eelgrass and starry stonewort in Cayuga Lake varied by date, water depth, and geographical location Sam B. Beck-Andersen, Finger Lakes Institute - Hobart and William Smith Colleges, USA	#123 Invasive alien species: a dual problem Chiara Magliozzi, European Commission Joint Research Centre, Italy	#115 Thirty-four years of monitoring invasive dreissenids in the St. Lawrence River and Lake Ontario David Bruce Conn, Berry College One Health Center and Harvard University Comparative Zoology, USA	#139 Environmental determinants of round goby invasion refuges at a river scale: implications for conservation of native biodiversity Olivier Morissette, Université du Québec à Chicoutimi, Canada
13:20-13:40	#189 <i>Hydrilla verticillata</i> in the Finger Lakes: using monitoring and collaboration to inform mitigation efforts Sam Beck-Andersen, Finger Lakes Institute - Hobart and William Smith Colleges, USA	#181 25-year update on prevalence of swim bladder nematode (<i>Anguillicola crassus</i>) in <i>Anguilla anguilla</i> life stages in Lough Erne, Northern Ireland Jonathan S. McDowell, Queen's University Belfast, UK	#52 Population characteristics of co-occurring non-native and native mussel species in Bolinao, Pangasinan, Philippines Maryjune Cabiguin, The Marine Science Institute, University of the Philippines Diliman, Philippines	#56 Effects of elevated temperature and salinity on the feeding efficiency of a globally invasive freshwater fish Catalina Claus, McGill University, Canada
13:40-14:00	Virtual #80 Mapping spatio temporal variations in extent of water hyacinth (<i>Eichhornia crassipes</i>) using multispectral imageries, case study of Rwandan water bodies Jeanne d'Arc Mukarugwiro, University of Witwatersrand, Rwanda	#147 Forty years of battling an invasive killer: Norway's fight against <i>Gyrodactylus salaris</i> Helge Bardal, Norwegian Veterinary Institute, Norway	#55 Behavioral and ecological responses of an invasive freshwater mussel to noise pollution Théophile Turco, ENES Bioacoustics Research Laboratory, CRNL, University of Saint-Etienne, France	#293 Exploring the movement patterns and capacity of invasive juvenile fish Sina Zarini, McMaster University, Canada
14:00-14:20		#125 Battling parasites on riverine fish with household heroes: a breakthrough in salmon conservation Anders Gjørwad Hagen, The Norwegian Institute for Water Research, Norway	#117 Limited co-existence of native mussels and zebra mussels in a river 25+ years after invasion Kennedy L. Zwarych, McGill University, Canada	#110 United they stand: exploring the role of gregarious behavior in the success of the invasive sea spider <i>Ammothea hilgendorfi</i> Antoine C. Flandroit, University of Mons, Belgium
14:20-14:40		#213 It must be something in the water: the impact of the invasive oyster parasite <i>Haplosporidium nelsoni</i> to oysters and people of the Bras D'or Lake, Cape Breton, Nova Scotia and their collective efforts for survival Jane Arnold, Beaton Institute, Canada	#22 The impacts of zebra mussels (<i>Dreissena polymorpha</i>) on native freshwater mussels in Lake Memphrémagog, QC Brielle Comartin, McGill University, Canada	#67 The importance of assessing risks associated with invasive species in the reintroduction of native species Gaute Velle, The Norwegian Scientific Committee for Food and Environment/ NORCE Norwegian Research Center/ University of Bergen, Norway
Convention Hall C5				
14:40-15:10	Networking Break			

15:10-17:10	Room 101 Session A-9 Search and Destroy II: Management and Control of Aquatic Invasive Plants Session Chair: Colin Cassin, Invasive Species Centre	Room 102 Session B-9 It's a Small World: Organisms in Trade, a Global Issue Session Chair: Hugo Verreycken, INBO	Room 103 Session C-9 Spineless, but Assertive – Impacts and Management of AIS Invertebrates Session Chair: Doug Jensen, Minnesota Department of Natural Resources	Room 109 Session D-9 Risky Business III: Risk Assessment to Prevent Invasions Session Chair: Jaclyn Hill, Fisheries and Oceans Canada
15:10-15:30	#122 First results of the Ecosystem Resilience Approach (ERA) to control the invasive alien species Janneke M.M. van der Loop, Stichting Bargerveen & Radboud University, The Netherlands	#12 An International approach to addressing aquatic invasive species (AIS) in commerce Leah Elwell, Creative Resource Strategies, LLC, USA	#2 Non-indigenous freshwater jellyfish in BC and North America - small neobiota with large potential Florian Luskow, University of British Columbia, Canada	#17 A new tool for setting biodiversity management priorities adapted from aquatic invasive species management: a pilot using Atlantic salmon (<i>Salmo salar</i>) in Nova Scotia, Canada Sarah E. Kingsbury, Fisheries and Oceans Canada, Canada
15:30-15:50	#51 Biological control of invasive aquatic plant species using native species, a pilot study Janneke M.M. van der Loop, Bargerveen Foundation & Radboud University, The Netherlands	#206 Enhancing risk assessment and early warning for alien species: a web scraping solution Frank Collas, Radboud University, The Netherlands	#143 Literally metal: non-native mystery snails accumulate metals and transfer metals to offspring Lynne E. Beaty, Penn State Erie, The Behrend College, USA	#120 A new screening level risk assessment tool for aquatic invasive species in Canada: testing and verifying its application to freshwater and marine species Mark A. Wilcox, Fisheries and Oceans Canada, Canada
15:50-16:10	Virtual #148 Partnering to conduct early detection and rapid response efforts for invasive water soldier (<i>Stratiotes aloides</i>) in Ontario Robert McGowan, Ontario Federation of Anglers and Hunters, Canada	#6 The pet trade as a vector for non-native species spread: insights from Germany James W.E. Dickey, GEOMAR Kiel, Freie Universität Berlin, IGB Berlin, Germany	#216 Feeding habits of <i>Callinectes sapidus</i> in a temperate European estuary Elena Ortega Jiménez, Institute of Marine Science of Andalusia, Spain	#276 Raw Water Transfers: understanding a major global pathway of freshwater invasive non-native species spread Ava Waine, Newcastle University, UK
16:10-16:30	#165 Management of <i>Ludwigia peploides</i> and <i>Hydrocharis morris-rana</i> in the Peconic River of Long Island, NY, USA Catherine McGlynn, New York State Department of Environmental Conservation, USA	Virtual #210 After action findings from the zebra mussel infesting marimo moss balls in trade incidents Robin Hopkins, Oregon Sea Grant, USA	#292 A novel sampling method for collecting the polyp stage of the invasive freshwater hydrozoan <i>Craspedacusta sowerbii</i> in aquatic habitats Jonathan Zhu, Wheaton College, USA	#155 Quantifying and examining impacts of priority invasive fishes in the southeastern U.S. Matthew Neilson, U.S. Geological Survey, USA
16:30-16:50	#59 Predicting the risk of range expansion for a newly established invasive duckweed species in Europe and Canada Debora Andrade-Pereira, University of Waterloo, Canada	# 145 Freshwater Non-indigenous Species in Newfoundland and Labrador Philip Sargent, Fisheries and Oceans Canada, Canada	#243 Age-and-growth relationships of an ecosystem engineer shrimp and its invasive parasite Grace Roa, Oregon State University, USA	

Thursday, May 16, 2024

Thursday, May 16, 2024			
Convention Hall Pre-Function Area			
07:30-12:00	Registration check-in desk open.		
07:30-08:30	PowerPoint submission desk open.		
Convention Hall C1-C2A			
08:30-08:40	Morning announcements		
08:40-09:20	Empowering precision management in invasive species and aquaculture ecosystems through artificial intelligence (AI) Suresh Neethirajan, Dalhousie University, Canada		
09:20-10:00	Public bounty programs to control aquatic invasive species Julian Olden, Washington State University, USA		
10:00-10:10	Student Oral and Poster Presentation Winner Awards		
Convention Hall C5			
10:10-10:30	Networking Break		
10:30-12:30	Room 101 Panel Session A-10 Organisms in Trade: Novel Communications and Adaptations Moderator: Colin Cassin, Invasive Species Centre	Room 102 Special Session B-10 The Spread of Non-native Species in a Changing World: Climate and Vector Change Moderator: Thomas Therriault, Fisheries and Oceans Canada, Canada	Room 103 Special Session C-10 Sharing Circle Facilitator: Rachelle McKay, a member of the Anishinaabe Nation & Educational Developer, Indigenous Knowledges & Ways of Knowing, Dalhousie University
	10:30-10:50	Panelists: Jenna White, Invasive Species Centre Andrew Drake, University of Toronto Scarborough, Canada Sam Chan, Oregon State University, Sea Grant College Program, USA	#209 Future aquatic invaders of the northeast U.S.: how climate change, human vectors, and natural history could bring southern and western species north Jan Pflugsten, U.S. Geological Survey, USA
	10:50-11:10	#246 Dispersal, invasion, and adaptation in a rapidly expanding green crab population Carolyn Tepolt, Woods Hole Oceanographic Institution, USA	This sharing circle is where knowledge about aquatic invasive species can be shared in a participatory format with Indigenous and non-Indigenous colleagues. Whether you would like to share your traditional knowledge on AIS from your own First Nation community, or are interested in learning from and sharing knowledge with Indigenous people who have lived in this territory since time immemorial, all are welcome to attend this session set up as a sharing circle to respect and communicate traditional knowledge on aquatic invasive species.
	11:10-11:30	Virtual #201 Biofouling as a vector for the transfer of invasive aquatic species in the Baltic Sea - potential assessment for commercial ships Joanna Hegele-Drywa, University of Gdańsk, Poland	
	11:30-11:50	#159 Knowledge gaps pose challenges to managing non-indigenous and aquatic invasive species in the Canadian Arctic Christine Bylenga, WSP Canada Inc., Canada	
	11:50-12:10	#286 Assessing the impact of global change on marine bioinvasions: ascidians as sentinel organisms Noa Shenkar, Tel-Aviv University, Israel	
	12:10-12:30	#218 Hurricanes as drivers of species invasions Sarah Stewart-Clark, Dalhousie University, Canada	
12:30	Conference Adjourns		
Post-conference Scientific Field Trip to the Aquatron Laboratory at Dalhousie University			
13:15-14:45	Group #1 (14 - Full)		
15:00-16:30	Group #2 14 - (Full)		