

2024 OTN Symposium

Halifax, N.S. | Sept. 23-26



ABOUT OTN

The Ocean Tracking Network (OTN) is an aquatic research, data management and partnership platform headquartered at Dalhousie University in Halifax, N.S.

Researchers are using OTN's telemetry and data infrastructures to document the movements, habitats and survival of aquatic animals in the context of changing global environments.

Knowledge generated through OTN collaborations is used provincially, federally and internationally to help guide the conservation and management of aquatic species and the sustainable use of ocean and freshwater resources.

Learn more about OTN's data services, study design support, and equipment loans: <https://oceantrackingnetwork.org/>



Keynote speaker: Dr. Sara Iverson

Sara grew up in Michigan, spending her summers on the waters of northern Lake Huron. There, she nurtured her passion for animals, nature and conservation from an early age. She pursued her B.Sc. in zoology at Duke University. Following a post-graduate research fellowship at the Max Planck Institute for Behavioral Physiology, she began her long association with the department of zoological research at the Smithsonian Institution's National Zoo, first as a PhD student (jointly with the University of Maryland) working on the physiological ecology of sea lions in the outer California Channel Islands and subsequently as a long-term Smithsonian research associate.

After receiving her PhD, she held a postdoctoral fellowship at Georgetown University and then a Natural Sciences and Engineering Research Council of Canada (NSERC) international postdoctoral fellowship at the Canadian Institute of Fisheries Technology to work primarily on developing methods for elucidating marine mammal diets and aquatic food webs.

In 1994, Sara became a professor in the biology department at Dalhousie University, establishing a long-term research program on physiological ecology and fat metabolism in marine mammals, seabirds and Holarctic bears. Sara is a former NSERC EWR Steacie Fellow, Killam Prize Awardee, University Research Fellow, and is a Fellow of the Royal Society of Canada, Academy of Science.

Sara became the scientific director of OTN as it was being launched in 2008 and co-led and directed OTN with executive director, Fred Whoriskey, until December 2023. Together, they have overseen the growth of OTN from its launch as a seven-year International Joint Venture Project into a preeminent Canada Foundation for Innovation national research facility (Major Science Initiative). Although Sara officially stepped down as scientific director last year, she will remain intricately connected to OTN through scientific advisory and research roles—and as a forever OTN family member.



Tuesday, September 24

8:30 Registration

9:00 Welcome remarks in Guild Hall

9:30 Keynote: Tracking marine animals and ocean ecosystems: perspectives from one woman of wild science - Sara Iverson

10:30 Break

11:00 Oral presentations (2 concurrent sessions)

International research programs <i>Room: Guild Hall</i>	Freshwater & estuaries <i>Room: Commons</i>
<i>A roadmap for telemetry impact: using a Three Horizons Framework for ETN-UK and Ireland - Vivian Nguyen</i>	<i>Using tracking studies to support the resurgence of Coast Salish First Nations fishing technologies - Jared Connoy, Caytlyn McFadden</i>
<i>First insights into the movement ecology of reef mantas (Mobula alfredi) in South Africa - Nakia Cullain</i>	<i>Habitat-dependent metabolic costs of movement for a wild cold-water fish - Benjamin Hlina</i>
<i>Horizontal movement phenotypes of spiny dogfish and their social interactions in four dimensions - Lotte Dahlmo</i>	<i>Using machine learning to compare acoustic receiver performance across different river systems - Devon Smith</i>
<i>Manta movements in the Mexican Pacific Ocean - Paul Preciado-González</i>	

12:00 Lunch in the Commons

13:00 Oral presentations (3 concurrent sessions)

International research programs <i>Room: Guild Hall</i>	Freshwater & estuaries <i>Room: Commons</i>	Collaboration & outreach <i>Room: C1 (Cabinet & Campaign)</i>
<i>Migration and residency patterns of nurse sharks (Ginglymostoma cirratum) tagged in Biscayne Bay - Sander Elliott</i>	<i>Using Etuaptmumk (Two-Eyed Seeing) to understand movements of ji'kaw (striped bass) in Pitu'pa'q (Bras d'Or Lake) - Caitlin Bate</i>	<i>Leveraging novel opportunities to engage public audiences in ocean science - Amanda Leslie</i>
<i>Decoding the drivers of habitat partitioning in sympatric sharks at a remote atoll - Chloe Blandino</i>	<i>What happens under the ice doesn't stay under the ice anymore! New insights on the spawning behaviour of Arctic salmonids using fine-scale positioning and oviduct tags - Véronique Dubos</i>	<i>Assembling a community-led framework for telemetry data analysis - Hugo Flavio</i>
<i>Decoding acoustically tagged tiger shark (Galeocerdo cuvier) seasonal movements around Maui Nui, Hawai'i - Paige Wernli</i>	CANCELLED - <i>Describing movements of ecologically and economically important fish species in the Great Lakes - Chris Vandergoot</i>	<i>Bridging communities and Apoqnmaulti'k: the role of community liaisons - Skyler Jeddore</i>
	<i>Comparing the migration behaviour and survival of Atlantic salmon (Salmo salar) and brown trout (Salmo trutta) smolts - Lene Sortland</i>	<i>Utilizing data mobilization and collaboration in international scientific partnerships: best practices and promising results from the Atlantic Salmon Research Joint Venture - Alexis Knight</i>

14:00 Break

14:30 Speed talks (3 concurrent sessions)

Management & best practices Room: C2 (Cunard & Citadel)	Movement ecology Room: Commons	Conservation & management Room: C1 (Cabinet & Campaign)
CANCELLED - TrackdAT: a global acoustic telemetry metadata project - Chris Vandergoot	Temporal variability in estuarine consumer movement strategies: ecological causes and consequences - Mack White	Movements and connectivity of the great hammerhead shark in the western Tuamotu archipelago: in search of its functional habitats - Tatiana Boube
Development and growth of the Atlantic Cooperative Telemetry Network - Kim Richie	Atlantic mackerel collapse: examining spatial ecology in support of stock recovery - Morgan Piczak	Developing management and conservation relevant high-resolution species distribution models of blue sharks and whale sharks in the North Atlantic and Mexican Pacific Ocean - Esteban Salazar
Using telemetry to assess the efficacy of a new Marine Protected Area for protecting fish spawning aggregations - Jessica Robichaud	Fine-scale habitat use by landlocked Arctic charr (<i>Salvelinus alpinus</i>) in a Maine, USA lake - Gregory Kronisch	The blackchin guitarfish in Cabo Verde: past, present and future conservation research - Manuel Dureuil
Best practices guide for acoustic telemetry applications to offshore wind impact monitoring - Beth Bowers	Spatial overlap of alien European flounder (<i>Platichthys flesus</i>), native Arctic charr (<i>Salvelinus alpinus</i>) and brown trout (<i>Salmo trutta</i>) in near-shore waters - Michelle Valliant	Social behaviour of tiger sharks (<i>Galeocerdo cuvier</i>) in Fernando de Noronha: a rare observation - Danielle Viana
MigraMar on satellite and acoustic tagging in the Eastern Tropical Pacific - Marta Cambra	Seasonal residency and overwintering behaviour of striped bass (<i>Morone saxatilis</i>) in the Annapolis River, Nova Scotia - Keeler Colton	A systematic assessment of the increasing presence of white sharks in Atlantic Canada waters - Hassen Allegue
	Extreme dives in swordfish: characterization of movements and exploration of motivations - Ciara Willis	Acoustic telemetry network in Fernando de Noronha: from understanding shark behaviour to integrated marine conservation - Ivan Martins

15:30 Workshops (3 concurrent sessions)

Workshop Room: C2 (Cunard & Citadel)	Workshop Room: Commons	Workshop Room: C1 (Cabinet & Campaign)
Using reflexivity for equitable and rigorous science - Megan Bailey, Rachael Cadman	CANCELLED - Use of electricity to immobilize fish for surgical practices - Chris Vandergoot	Relative habitat selection and resource selection functions in aquatic acoustic telemetry: theory, application, and process - Lucas Griffin, Jonathan Rodemann

17:00 Poster reception in Guild Hall

19:00 End of day

Wednesday, September 25

9:00 Welcome remarks in Guild Hall

9:30 Plenary: Track, connect, transform: the next five years of OTN
- Robert Lennox and Evelien VanderKloet

10:30 Break

11:00 Oral presentations (3 concurrent sessions)

Canadian research programs <i>Room: Guild Hall</i>	Movement ecology <i>Room: Commons</i>	Methods & tools <i>Room: C1 (Cabinet & Campaign)</i>
<i>Insights from the Northern Cod Acoustic Telemetry (NCAT) project - Daniel Ruzzante</i>	<i>Implantation of a micro-acoustic tag alters feeding behaviour in juvenile sea lamprey - Evan Bellhouse</i>	<i>A retrospective on OTN's role in advancing statistical methods for complex marine data analysis - Joanna Mills Flemming</i>
<i>Conflicts in conservation: is the dramatic recovery of striped bass (Morone saxatilis) in the Miramichi River harming the conservation of Atlantic salmon (Salmo salar)? - Karl Phillips</i>	<i>Gone but not forgotten: collaborative telemetry network provides insight into out-of-system movements of common snook - Victoria Goldner</i>	<i>A methodological approach towards resource landscapes through acoustic telemetry and stable isotope analysis: Atlantic tarpon - Lucas Griffin</i>
<i>Impact of finfish farms in Eastern Canada on American lobster (Homarus americanus) and rock crab (Cancer irroratus) movements - Marie-France Lavoie</i>	<i>Updated development of a species distribution model to assess overlap with marine renewable energy devices - Charles Bangley</i>	<i>Step selection analysis with non-linear and random effects in mgcv - Natasha Klappstein</i>
<i>Transforming relationships with the ocean through science at the Bamfield Marine Sciences Centre - towards a new frontier for ocean science in Western Canada - Sean Rogers</i>		<i>DaViT: bridging the gap to open data - Joy Young</i>

12:00 Lunch in the Commons

13:00 Oral presentations (3 concurrent sessions)

Canadian research programs <i>Room: Guild Hall</i>	Collaboration & outreach <i>Room: Commons</i>	Conservation & management <i>Room: C1 (Cabinet & Campaign)</i>
<i>Ocean Tracking Network detections for the 'Maritimes Conservation Network' inform conservation science and monitoring - Harri Pettitt-Wade</i>	<i>The Ocean Data project: monitoring Mi'kma'ki climate health - Ebony Demers</i>	<i>The School of Charlie Joe (Dennis): how collaborative projects like Apoqnmaulti'k offer a way forward for aquatic stewardship - Shelley Denny</i>
<i>Rock crab (Cancer irroratus) and spider crab (Hyas spp.) clear seasonal patterns of movement with drastically reduced activity during the winter months - Kathleen MacGregor</i>	<i>Making waves in the North Sea - the NorTrack & DTOTrack projects - Claudia Meneses</i>	<i>The potential of passive acoustic monitoring to help inform conservation and management of northwest Atlantic leatherback sea turtles (Dermochelys coriacea) - Derek Aoki</i>

<i>Influences of environmental and individual-level covariates on movement behaviour in American lobster - Jean-Marc Nicolas</i>	<i>Turkish Straits Telemetry Network: bluefish tracking effort - Aytaç Özgül</i>	<i>Using remote sensing and passive integrated transponder mark-recapture to understand impacts of two decades of habitat change on a juvenile lemon shark nursery - Emily Cormier</i>
<i>Diving deeper into whale foraging ecology using integrated technologies and approaches - Sarah Fortune</i>	<i>Animal telemetry and the Brazilian National Oceanic Observation and Monitoring Network (ReNOMO): integration to OTN - Mônica M. C. Muelbert</i>	<i>iKaluk: an overview of the Arctic char fishery in Nunatsiavut to support Inuit food security - Dylan Seidler</i>

14:00 Break

14:30 Panels and premium presentations (3 concurrent sessions)

Presentations (30 min each) Room: Guild Hall	Panel (1.5 hrs) Room: Commons	Panel (1 hr) Room: C1 (Cabinet & Campaign)
<i>NexTrak: the future of acoustic telemetry - Stephanie Smedbol, Innovasea</i>	<i>Tagging sensor panel - Rob Lennox, Emma Cooke, Natalie Koopman, Spencer Richard, Karl Phillips</i>	<i>Ocean-going robots: applications in aquatic telemetry research - Mae Seto, Adam Comeau, Sean Potter, Fiona Lynch</i>
<i>Advancements in acoustic telemetry - Donna Kehoe, Lotek</i>		

16:00 Closing remarks in Guild Hall

16:30 End of day





NexTrak

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Greater range

2x

More detections



Better data

Powered by  **INNOVASEA**

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BLUE SHARK



ATLANTIC COD



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