# Leah Crowe, Integrated Statistics under contract to the Northeast Fisheries Science Center & University of Otago

Leah first started studying North Atlantic right whales as an intern in 2009, and has been directly involved in field research on this species ever since. Don't blame her, but when she washed ashore from Ohio to the East Coast, the Gulf of Maine had turned up the temperature and right whales started throwing the research community for a loop. At the Whale Center of New England (2009–2011), Leah spent time on Jeffreys Ledge and saw her first (but not last) right whale entanglement. While working at Allied Whale, Leah went out on trips to Jordan Basin when that seemed like the next big place (2011). The next year at the Florida Fish and Wildlife Conservation Commission, she worked as an observer on the calving grounds during one of the worst calving seasons (2012). Leah followed the whales north and worked at the Center for Coastal Studies (2012– 2014) exploring right whale presence in the Southern New England region, as well as conducting aerial surveys in Cape Cod Bay at the time when half the population was showing up there. Later, Leah ended up at the Northeast Fisheries Science Center as a contractor (2014-present) where she worked in the plane and on the boat hitting up all the old and new haunts from Maryland to Newfoundland-sometimes finding them, sometimes not. She first attended a NARWC meeting in 2012, and has presented at four of the last five meetings on work she and her wonderful Consortium colleagues have done using photo-ID to better understand movement and population structure as well as tools to help streamline data processing and the analysis for potential dynamic management zones. In addition to North Atlantic right whales, Leah has been involved in studies on humpback and bowhead whales, loggerhead and leatherback sea turtles, seals, basking sharks, and now her latest species: bottlenose dolphins in southwest Aotearoa-New Zealand, of which she is studying for her PhD research at the University of Otago. "Thanks for considering me for the student rep position, " said Leah. "I hope to use this opportunity to not only gain experience of being on a scientific board for my own development, but to also leverage my connections in this community to help students connect to established folks and opportunities."

# Gina Lonati, University of New Brunswick Saint John

Gina Lonati is a third-year PhD student and Vanier Scholar at the University of New Brunswick Saint John. The urgency of North Atlantic right whale conservation coupled with the collaborative nature of the Consortium have inspired Gina to run for this student representative position. Since 2019, she has been studying the distribution, quantity, and quality of right whale prey in the Gulf of St. Lawrence and piloting a drone to conduct photogrammetry and thermal imaging of whales in Atlantic Canada and the northeast United States. She has years of experience with marine mammal rescue/rehabilitation, necropsies, genetics sampling, photo-identification, data management, and outreach. Gina has served on graduate student associations at UNBSJ and the University of North Carolina Wilmington, where she earned her MSc in 2014. She also coaches volleyball at UNBSJ and enjoys crafting, hiking, and various team sports.

#### **General Position Nominees**

#### Mark Baumgartner, Woods Hole Oceanographic Institution

Mark Baumgartner is a marine ecologist and senior scientist in the Biology Department of the Woods Hole Oceanographic Institution. He has a bachelors degree in mathematics and computer science, a masters degree in oceanography and a PhD in biological oceanography. He studies the ecology of zooplankton and whales, has conducted research on right whale foraging ecology, distribution, prey, habitat, and acoustics, and is most recently involved in technology development projects concerning near real-time passive acoustic monitoring and buoyless fishing. Mark has previously served as vice-chair, chair, and board member of the North Atlantic Right Whale Consortium.

## Diane Borggaard, Greater Atlantic Regional Office, NMFS

Diane Borggaard has worked on protected species issues for over twenty years. This includes earning a Master of Science under Dr. Jon Lien at Memorial University of Newfoundland studying the impacts of <u>industrial</u> activity on large whales. She has worked for NMFS to further the protection and recovery of protected species issues under both the Marine Mammal Protection Act and Endangered Species Act. This includes <u>developing</u> solutions to U.S. Atlantic large whale entanglements, including right whales, for close to a decade. She has been involved in many <u>NMFS regional climate change</u> initiatives, and co-led a <u>North Atlantic right whale</u> scenario planning initiative. Diane currently serves as NMFS Greater Atlantic Region's North Atlantic Right Whale Recovery Coordinator. She has extensive experience bringing together people from a broad range of backgrounds to further the recovery of protected species and species at risk. Most recently, this includes serving as NMFS' Greater Atlantic Region Liaison to the <u>Northeast U.S. North Atlantic Right Whale</u> Implementation Team and Implementation Team's Population Evaluation Tool Subgroup.

## Lisa Conger, Northeast Fisheries Science Center

Lisa Conger has participated in right whale research for 30 years. She began working with the New England Aquarium in 1992 in the Bay of Fundy and the southeast U.S. calving grounds. After 15 years with NEAq she moved to the Northeast Fisheries Science Center in Woods Hole, where she continues to push long term monitoring of right whales forward and has worked collaboratively to promote the use of innovative new technologies to study right whales. Lisa started a vessel-based program in Cape Cod bay in 2012 to fill a gap in data collection there. She has been a proponent for and intimately involved in the biopsy effort supporting genetic studies, especially that of all right whale calves, and has begun a photogrammetry study in the calving grounds and Cape Cod bay. Today, Lisa runs annual field programs to study right whales in the southeast calving grounds, Cape Cod bay and in offshore waters of New England. She has been a supporter of the NARWC since its inception.

#### Nathan Crum, Florida Fish and Wildlife Conservation Commission

Nathan Crum is an Associate Research Scientist at the Florida Fish and Wildlife Conservation Commission (FWC). He has worked for FWC's North Atlantic right whale research program since 2017 and has led the program since 2020. Nathan's research focuses on understanding the demography, distribution, and movements of right whales in the Southeastern US and on estimating the effects of management actions on the risk of vessel strikes. He earned Master's degrees in Natural Resources and Statistics at Cornell University and the University of South Florida, respectively.

#### Brenna Frasier, Nova Scotia Museum

Brenna is the Curator of Zoology with the Nova Scotia Museum. Her background falls primarily in the study of ancient DNA to address questions of species diversity, population structure and demographic history, particularly in species that have been extensively hunted. She has spent the last 20 years using genetic analysis to address questions of species history and conservation of the North Atlantic right whale. This has included comanaging the right whale DNA databank and annual genetic profiling of the species. Brenna is passionate about scientific and outdoor outreach and education, coordinating annual maritimes-based youth camps (marine mammal summer camp, forensic science camp) and acting on the board of a local forest school. She has since

completed several projects creating research materials and field guides to assist in Traditional Ecological Knowledge (TEK) studies on marine mammals in the Canadian Arctic.

## Timothy Frasier, St. Mary's University

Tim Frasier is a professor in the department of Biology at Saint Mary's University in Halifax, Nova Scotia. He has been studying North Atlantic right whales since 1999. Although he is interested in all things whale-related, and has been involved in aerial- and vessel-based surveys, his focus is on genetics. His lab houses the archival tissue and DNA bank for the species, and his research focuses on using genetics/genomics to aid population monitoring (through things like individual identification and parentage analyses), as well as to identify the degree to which genetic characteristics (e.g., low diversity and/or inbreeding) are limiting species recovery.

## Laura Ganley, New England Aquarium

Laura Ganley is an Associate Research Scientist in the Spatial Ecology and Mapping Program (EcoMap) at the New England Aquarium. She has been studying large whales in the Gulf of Maine since 2005. Laura has extensive aerial survey experience, having flown right whale surveys in the southeast U.S., Cape Cod Bay, and in the Beaufort and Chukchi Seas. Laura's Ph.D. centered on estimating right whale abundance from aerial surveys and determining the environmental and biological mechanisms driving variations in abundance. In EcoMap Laura uses species distribution and mechanistic modeling techniques to understand the impacts of climate change and wind energy development on large whales, assess the utility of protected species observer data collected by wind energy developers, and quantify the exposure of large whales to vessels.

## Adèle Labbé, Department of Fisheries and Oceans Canada

Adèle Labbé is a Senior Science Advisor in Marine Mammal Science at DFO's national headquarters in Ottawa. Since 2020, she has been providing national leadership in the coordination of DFO's NARW science research program and has led the development of <u>Whale Insight</u>, a visualization tool modeled after WhaleMap. Through this work and her role in the multi-faceted <u>smartWhales initiative</u>, she plays a key role in fostering strong relationships with a broad range of stakeholders and furthering collaborations that support right whale conservation efforts while prioritizing the integrity of data owners' intellectual property and data rights. Since joining the right whale team at DFO, she has consistently attended the NARWC annual meeting. Adèle holds a Bachelor of Science (Honours) in Marine and Freshwater Biology from the University of Guelph as well as a Master's in Environmental Planning. Prior to joining Canada's marine mammal science team, Adèle spent over a decade as a science advisor to municipal and regional councils on matters of environmental planning where she effectively integrated science into management decisions.

# **Bob Lynch, Center for Coastal Studies**

Bob Lynch is the Rescue Operations Manager for the Center for Coastal Studies' Marine Animal Entanglement Response team. For over 12 years, he has worked in the field from small boats and planes, collecting photo-ID and biopsies of right whales and other large whales in the Gulf of Maine. As a Level 5 disentanglement responder under the MMHSRP, Bob's main focus is disentanglement, managing large whale entanglement databases, and conducting disentanglement trainings.

#### Susan Parks, Syracuse University

Susan Parks has studied North Atlantic right whale behavior and acoustic communication for 24 years. Her research focuses on understanding the behavioral context and individual variability in sound production of right whales to aid in improved passive acoustic monitoring for conservation from Canadian waters to the Southeastern U.S. calving grounds. She is a Professor in Biology at Syracuse University. She earned her B.A. in Biology (Neurobiology and Behavior) from Cornell University and her Ph.D. in Biological Oceanography in the Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program in Oceanography. Susan has previously served as vice-chair, chair, and board member of the North Atlantic Right Whale Consortium.

#### Jessica Redfern, Anderson Cabot Center for Ocean Life at the New England Aquarium

Dr. Jessica Redfern is a Senior Scientist and Chair of the Spatial Ecology, Mapping, and Assessment Program (EcoMap) at the New England Aquarium's Anderson Cabot Center. The goal of the EcoMap program is to assess risk to marine species from human activities and climate change. EcoMap uses innovative monitoring and modeling techniques to provide a framework for internal and external collaborators to develop solutions to marine conservation challenges. Examples of the conservation challenges that EcoMap addresses include ship strikes, chronic noise, entanglement, and minimizing impacts of wind energy. Jessica develops cetacean-habitat models and uses predictions from these models to assess risk to cetaceans. Her current projects include assessing the risk of ships striking whales in areas with high shipping traffic around the world, developing methods to assess entanglement risk, identifying priority habitat for large whales, and using oceanographic data to interpret trends in the abundance of cetaceans.