



**Gulf of Maine Council
2019 Award Winners**

Sustainable Communities Award

The Gulf of Maine Council's Sustainable Communities Award recognizes a community, or group within a community for exemplary work in achieving sustainable outcomes related to the environment and economy within the Gulf of Maine.

ACAP Saint John, New Brunswick

As climate change presents the City of Saint John with generational challenges, ACAP Saint John, a community based not-for-profit organization, is working collaboratively with the community and the municipality to adapt to these changes and to improve the quality of life for its residents.

This past year, ACAP Saint John launched Adapt SJ, a process where they will investigate, test and implement ways that climate adaptation can help the city meet its basic development needs, build equitable and vibrant neighborhoods, and become a resilient, thriving community for all.

In collaboration with the City of Saint John, and through support from New Brunswick's Climate Change Secretariat, ACAP Saint John will also develop a Climate Change Adaptation Plan for the city. They will incorporate climate change adaptation strategies for stormwater management while identifying, assessing and mapping risks and vulnerabilities in the city, and developing adaptation methods to increase resiliency throughout Saint John. The project will provide a robust understanding of climate change issues and direct both the City of Saint John and ACAP Saint John in on-the-ground adaptation actions and capital investments.

ACAP Saint John's team is committed to providing Saint John with the best available science and social policy, and to integrating the thoughts and ideas of the community, all of which come together to guide the plan forward. At its heart, ACAP has always been an environmental incubator, one that transforms and evolves the region's landscapes with the help of governments, businesses and community collaborators. Their work is designed to be seen, felt and experienced throughout the environment – from wetlands and coastlines to streets and public spaces.

Susan Snow-Cotter Leadership Award

The Susan Snow-Cotter Leadership Award is bestowed in memory of Susan Snow-Cotter, a long-time friend and supporter of the Gulf of Maine Council. This award is given to an individual from one of the five states and provinces bordering the Gulf of Maine to recognize a coastal management professional who exemplifies outstanding leadership or exceptional mentoring in the Gulf of Maine watershed.

Susan Adamowicz, Maine

Susan Adamowicz is being honored with the Susan Snow-Cotter Leadership Award in recognition of her leadership in protecting salt marsh systems throughout the Gulf of Maine. Serving as the Land Management and Research Demonstration manager for the US Fish and Wildlife Service at the Rachel

Carson National Wildlife Refuge, Susan Adamowicz has become a regional and national leader over the past 13 years.

Through her lens of conservation and management, Susan has brought new ideas and approaches to improve assessment and management of salt marshes throughout the Gulf of Maine. Specifically, she has developed strategies to increase the resiliency of marshes in the face of climate change, especially sea level rise. She pioneered the Salt Marsh Integrity Index and new methods to reduce stresses from ditching, impoundment, and invasive *Phragmites* as well as sea level rise. She developed partnerships and collaborations to promote resilient marshes in the Gulf of Maine, often serving as the 'glue' that forged valuable connections and knowledge-sharing among researchers, managers, agency staff and practitioners.

Susan's leadership on such issues as die-back, salt marsh sparrow habitat, and improving resiliency of marshes following Superstorm Sandy has brought New Englanders together and helped foster and translate science and management within and beyond the Gulf of Maine at regional and national meetings. In 2015 she gave a plenary address to the Society of Wetlands Scientists National meeting where she invoked the trials and legacy of Rachel Carlson to urge us to rise to the challenge of protecting and managing natural systems in the face of human pressures. Currently, she is President of the New England Estuarine Research Society where she promotes excellence in estuarine science and also mentors the next generation of coastal scientists and managers. Susan's unparalleled dedication and leadership to conserve and research salt marshes in the Gulf of Maine deserves this special recognition.

Sustainable Industry Awards

The Gulf of Maine Council's Sustainable Industry Awards recognize an individual, company, or organization within the Gulf of Maine region for demonstrating innovation and leadership in efforts to improve the well-being of the Gulf of Maine ecosystem and the communities that call it home.

Bill Mook, Maine

Bill Mook exemplifies the innovation, leadership and concern for the Gulf of Maine. Bill owns Mook Sea Farm, an oyster farm on the Damariscotta River in Maine. Since 1985, Bill has consistently operated his business with a forward-thinking and scientific approach to sustainable seafood. Bill recognizes the link between environmental quality and aquaculture, and is a leader in environmental action at local, regional, and national levels. Bill was a founding member of the Damariscotta Clean Water Program that served as a model for a coastwide volunteer monitoring program for pollution source tracking. He promotes research in his hatchery, employing a full-time Ph.D. Research and Development lead (Dr. Meredith White) and is generous in collaborating with researchers, students and summer interns.

Bill is a tireless advocate for climate change awareness, including the impacts of ocean acidification on calcifying organisms such as oysters. He was a member of the Maine Ocean Acidification Commission

and demonstrates continued commitment to local action through the Maine Ocean and Coastal Acidification partnership. Both Bill and Meredith are members of the Northeast Coastal Acidification Network, promoting regional coordination and ensuring industry representation on relevant issues. Bill has presented to diverse audiences at regional conferences and testified in the Maine State House and US Congress about the impacts of ocean acidification and climate change to his industry. He is a founding member of the Shellfish Growers Climate Coalition in collaboration with The Nature Conservancy.

Bill incorporates sustainability throughout all facets of his business – including the use of energy efficiency measures and solar power for his shellfish facility to become more resilient to climate change. Through his personal commitment, investment and dedication to a sustainable Gulf of Maine ecosystem, Bill is highly deserving of this recognition.

Coldwater Lobster Association, Nova Scotia

A small group of lobster fishermen in Southwestern Nova Scotia realized that doing things the same old way wasn't going to work anymore and they decided to do something about it. In 2014, they formed the Coldwater Lobster Association which has grown into an industry leader in management, safety, quality and environmental matters in Canada's most lucrative lobster fishing area known as LFA 34.

Coldwater's commitment to responsible fishing is evident in their recent initiative to protect endangered North Atlantic right whales through a pilot study on ropeless fishing gear. Line entanglements are a significant contributing factor to right whale mortality. Working with a private partner, Coldwater field tested ropeless fishing technology and prepared a report on their findings. Their report is widely recognized for contributing to the development of new technology to protect whales in both Canada and the United States.

Fishing is the most dangerous occupation in Nova Scotia and Coldwater has shared perspectives and ideas with government to help improve safety for Nova Scotia's fishing industry. For example, they developed safety workbooks, contributed to the development of fishing friendly PFDs, supported safety drills, and promoted fishing safety at every opportunity.

Coldwater Lobster Association was founded on a principle of environmental sustainability. With government partnerships, they initiated a comprehensive by-catch monitoring program to increase understanding of species interactions and inform efforts to promote responsible fishing. The association is also developing a comprehensive environmental database to advance understanding about lobster molt and quality issues, lobster movements, ocean temperatures, and more.

Though based in Southwestern Nova Scotia, the impacts of the Coldwater Lobster Association's work stretch throughout the province and beyond. In an effort to share industry knowledge and raise awareness about key issues, Coldwater launched *King Lobster Magazine* to provide fishermen with news about issues that are most important to them.

Finally, recognizing the value of future generations to Nova Scotia's seafood industry, Coldwater launched a new scholarship program that will provide five post-secondary bursaries for youth interested in pursuing a career in the seafood industry. What started as a small group of fishermen interested in doing things better has resulted in a completely new approach to the business of fishing.

Visionary Awards

Gulf of Maine Council Visionary Awards are presented to individuals or organizations within each of the five Gulf of Maine jurisdictions of Massachusetts, New Hampshire, Maine, New Brunswick, and Nova Scotia. These Awards recognize innovation, creativity, and commitment to promoting a healthy Gulf of Maine.

Leia Lowery, Melissa Luetje and Pamela Morgan, Maine

Leia Lowery, Melissa Luetje and Pamela Morgan are being recognized for their leadership through the Gulf of Maine Institute's Gulf of Maine Community-Based Stewardship Initiative. This innovative program brings a new approach to elementary through college-level STEM education that pairs interdisciplinary classroom learning with outdoor, hands-on, locally significant projects.

The Gulf of Maine Community-Based Stewardship Initiative is the result of Gulf of Maine Institute's 19 years of promoting place-based education throughout the watershed and is an effort to disseminate this program across the bioregion. These three award winners participated in a collaborative pilot project among Kennebunkport Conservation Trust, Kennebunk Regional High School, and the University of New England.

Their innovative new course, *Gulf of Maine Studies*, combined high school and university students in a project investigating the feasibility of converting the iconic Goat Island heritage lighthouse (part of the Kennebunkport Conservation Trust) from the grid to alternative energy. This year-long, comprehensive, course covers Gulf of Maine issues with a focus on climate change and civic engagement. This year, 30 Kennebunk High School students and 15 University of New England students were enrolled and received college credit.

The course is on track to become a permanent offering at both Kennebunk High School and the University of New England. The nominees' remarkable achievement will help bring the Gulf of Maine Community Based Stewardship Initiative into schoolrooms throughout the watershed. Their project has already inspired creation of several other sites throughout the Gulf of Maine, including Bethlehem Elementary in New Hampshire, Newburyport High School in Massachusetts, Lowell Middlesex Academy in Massachusetts, and Horton High School in Greenwich, Nova Scotia. Acknowledging Melissa, Pam and Leia for their pioneering role recognizes that the Community Based Stewardship Initiative is an effective means of educating generations of students to become stewards for a healthy Gulf of Maine ecosystem.

Christopher Jamison and Jonathan Taggart, Maine

Jonathan Taggart and Christopher Jamison are being recognized with a Visionary Award for their significant contributions toward addressing the environmental problem of invasive green crabs in the Gulf of Maine. Green crabs eat bivalves, destroy marshes and eel grass beds, and compete with native crustaceans. Despite having invaded the Atlantic over 200 years ago, there is still no successful mitigation strategy to combat this pest. However, local volunteer Jonathan Taggart and fisherman Chris Jamison turned to the ‘if you can’t beat ‘em, eat ‘em’ strategy’ – with the concept that soft-shell green crabs could become a seafood delicacy and lucrative fishery in North America.

Jonathan Taggart was an early catalyst for the soft-shell green crab movement in the US. During a trip to Venice, Italy in 2015, he came across a local delicacy called moleche, deep fried soft-shell green crabs. He knew that green crabs were a problem in Maine and wondered why we didn’t have a similar fishery. Jonathan fostered an exchange of information between Venetian crab fishermen and US fishermen and worked with research scientists to perfect the ability to recognize pre-molt green crabs (the skill which the entire fishery hinges upon). Jonathan also worked with fishermen to develop cost-effective gear for holding pre-molt green crabs, and promoted the industry through media outreach.

In 2018, Chris Jamison - a lobster fisherman in mid-coast Maine - became the first person in the United States to produce and sell soft-shell green crabs. Since 2016, Chris had worked with a team of fishermen, researchers, volunteers, and environmental advocates to create a soft-shell green crab fishery in Maine. In 2017, he traveled to Venice to learn techniques directly from green crab fishermen. Chris then conducted a pilot study in 2018 producing about 100 soft-shell crabs per week during the June and July soft-shell season in Maine. He then sold those soft-shells directly to restaurants. The chefs loved the soft-shell product, and restaurants often sold out immediately after putting it on the menu.

Thanks to Jonathan and Chris’s collaborative efforts, creating a lucrative green crab fishery in North America is now a viable strategy for reducing negative impacts on the Gulf of Maine.

Dr. Tony Diamond, New Brunswick

Dr. Tony Diamond, a professor at the University of New Brunswick in Fredericton, is one of Canada’s most outstanding and prolific marine ornithologists, dedicated to the well-being of seabirds and ocean health in general. For decades, with his many graduate students, he has conducted a seabird research program on Machias Seal Island, as well as at other sites in the northern Gulf of Maine / Bay of Fundy. Here he has monitored seabirds at nesting sites to increase understanding of their survival, population numbers, food, predation effects, and relationships with fisheries species (such as Atlantic herring) and fisheries management. He has focused especially on birds such as terns and puffins, examining their diets and the influence of diminished fish populations on their survival rates, clutch sizes, survival of chicks, and other variables.

Dr. Diamond’s ecological research is fundamental to understanding not only the interactions of seabirds with ongoing fisheries, but also the influence of climate change in the Gulf of Maine, as increased water temperatures change species composition and distribution. His work has produced many publications in

key journals. Tony has also studied the impacts of tagging birds, essential for understanding migratory patterns, population numbers, and impacts of pollutants on birds.

Most recently, Tony participated in an ocean-wide study of Atlantic puffins, a red-listed declining seabird. He has also been a long-standing contributor to the Bay of Fundy Ecosystem Partnership, as a chairperson and speaker at its biennial science workshops. Tony's commitment to the oceans, the Gulf of Maine and marine ornithology, and his scientific productivity are exemplary and fully deserving of recognition by the Gulf of Maine Council.

Wanda and Calvin Van Tassel, Nova Scotia

Wanda and Calvin Van Tassel, and their daughter Jennifer, operate two local businesses, Fundy Dulse and Fundy Adventures, from their rural property in Gulliver's Cove, on the lower Bay of Fundy, Digby County, Nova Scotia. This family is a great example of hard working and enterprising coastal people in the larger Gulf of Maine, working in their coastal Fundy community to contribute to the local economy and pride of place, with due regard to the unique ecology of the coastal ecosystem.

Their first business, Fundy Dulse, is based on the availability of dulse, the red Rhodophyta alga (seaweed) that grows on the rocky intertidal and shallow subtidal shorelines of the lower Bay. With guidance from their scientific adviser, Dr. David Garbary, St. Francis Xavier University, they annually harvest the seaweed in an ecologically sustainable way, process and package it following Canadian Food Guidelines, and produce various products for sale in the region, e.g., dry crisp dulse, dulse powder, dulse flakes, etc. They are very careful not to overharvest the seaweed or overly disturb the local ecology. Wanda and Kevin also frequently and enthusiastically demonstrate their dulse business to students at local schools and through an ocean governance course of Dalhousie University.

Their second business, Fundy Adventures, is focused on tourists visiting the Fundy region of Nova Scotia. Through guided shoreline walks, whale watching, clamming, beach exploration, beach cleanups, and introductions to the local lobster industry, visitors learn about the coast and its many attributes. Collectively, the two businesses that Wanda and Calvin run are a wonderful example of a family owned coastal enterprise that supports the local Nova Scotia economy while respecting and sustaining the Bay of Fundy and Gulf of Maine ecosystem.

John Brazner and Jennifer West, Nova Scotia

Dr. John Brazner and Jennifer West provided the leadership and inspiration to help create the Jijuktu'kwejk Watershed Alliance - a partnership of citizens and communities from Berwick to Wolfville in Kings County, Nova Scotia, with the common vision of a healthy and sustainable natural environment around the Cornwallis River, directly benefiting the Gulf of Maine watershed.

The group started in 2016 and has already been making a significant contribution toward environmental awareness and protection efforts in the region. To begin with, the name Jijuktu'kwejk was selected because John, Jennifer and the rest of the organization's founders recognized that restoring the quality

of the river should start with restoring its name back to a time when it was cared for and respected by First Nations people for hundreds of years.

With a vision for a swimmable, fishable and drinkable river, the Watershed Alliance's objectives include improving watershed health, connecting people with the river through outdoor experiences, and maintaining an organization with a focus on education, teamwork, development, engagement and positive change.

Both Jennifer and John have been inspirational leaders in creating this dynamic and effective environmental organization. Jennifer served as the Watershed Alliance's first Executive Director and John has served on the Board of Directors since the very beginning and is now serving as Executive Director. Jennifer West and John Brazner are being recognized for their leadership, dedication and personal commitment to improving natural resources. Thanks to their efforts, the Jijuktu'kwejk Watershed Alliance has become a leader in conservation and restoration in the Annapolis Valley, Nova Scotia, and beyond.

Kevin Lucey, New Hampshire

As the Restoration Coordinator for the New Hampshire Coastal Program, Kevin Lucey provides vision and leadership for the region's most significant restoration efforts including the Resilient Tidal Crossings Project as well as multiple dam removal projects.

With 120 tidal crossings in New Hampshire's coastal region, Kevin recognized a need for regionally consistent, readily available information about critical infrastructure at the front lines of challenges associated with climate change. To address this need, Kevin convened and worked with partners across the region, including the Gulf of Maine Council, to develop a standard protocol for assessing tidal crossings. He then led an on-the-ground effort to assess every tidal crossing in New Hampshire. The resulting data set will be ranked, prioritized, and made available to road managers and natural resource professionals to advance replacement projects based on shared priorities.

For ten years, Kevin has provided competent, strong leadership for efforts to remove head of tide dams on the Bellamy, Cocheco, Exeter, Lamprey, and Winnicut Rivers. Dam removal projects are notorious for having significant technical, economic, and social challenges. Although dam removals are among the most difficult restoration projects to manage, the environmental and habitat benefits achieved once a dam is removed are considerable. Without Kevin's impressive skillset and vision, many of these projects would have simply died – crushed by their complexity. However, Kevin's persistence, fundraising ability, grant administration, strong technical skills, and steady, calm demeanor have been critical to maintaining forward momentum on these difficult projects. Again, dam removal is not easy, yet this does not stop Kevin from stepping up to the plate again and again to tackle these important projects head on. Kevin's work and leadership on these significant, important coastal restoration efforts is exemplary.

Abigail Lyon, New Hampshire

Abigail is the personification of professional drive and effectiveness combined with the personal commitment and belief behind everything she does. Her professionalism shines in all of her work and she is a pleasure to partner with on projects large and small. Her experience with the UNH Training for the Integration of Decision-Making and Ecosystem Science (TIDES) Program assures that she knows how to develop and implement an effective program and her work reflects her commitment to effectively link science to coastal decision-making.

Abigail's work history reflects her strong commitment to improving the environmental state of affairs in the Gulf of Maine. As the Program Coordinator and Whale Watch Naturalist with the Blue Ocean Society she connected people to the beauty and grandeur that are the Gulf of Maine. She has worked with all ages, from Kamp Kohut, to Pinkerton Academy, to her work as an Ambassador for EcoQuest Education, and serving on the Dover Open Lands Committee; she works with all ages sharing her love and enthusiasm for the natural world and how to care for it.

Abigail in her current position as the Community Technical Assistance Program Manager for the Piscataqua Region Estuaries Partnership is the energy behind Shoreline / beach cleanups, the Trash Free Piscataqua Project, the Municipal Board Empowerment Series, and she participates in the New Hampshire Coastal Adaptation Workgroup.

Outside of her work life Abigail does not stop, the following quote from her Social media sums it up well. "Whether it's dressing as my inspirational (fictional) hero, working with communities to protect water quality, observing and educating others about whales, pollution, and marine debris, checking out lunar eclipses, counting oyster spat, learning about innovative research, walking the shores of our estuaries, or building climate resilient gingerbread houses, I try my best to celebrate women and girls in science every, single, day." The Gulf of Maine is just one of many beneficiaries of her innovation, creativity, and commitment to marine protection.

Dr. Sofie Van Parijs and Dr. Leila Hatch

Underwater sounds are ubiquitous in the Gulf of Maine, yet historically they have gone unheard by humans at the surface. Marine mammals and many fish are highly adapted for producing and perceiving sound in the ocean. Two visionary researchers, Drs. Leila Hatch and Sofie Van Parijs, have developed new approaches for understanding underwater sound in the Gulf of Maine. In the short span of 10 years Leila and Sofie, working collaboratively from separate NOAA offices, have expanded the field of marine acoustics and developed international reputations for their innovative, high quality, applied science. This unique partnership between NOAA offices has produced a wealth of information and publications on the marine acoustic environment. It is at the forefront of the development of NOAA's Ocean Noise Strategy, research on Atlantic cod, North Atlantic right whales and an effort to collect baseline noise conditions now and into the future.

At the Stellwagen Bank National Marine Sanctuary where Leila works, the team has led projects to deploy passive acoustic listening devices recording low-frequency sound in the Sanctuary. In a seminal

publication, a novel modelling approach demonstrated that the highly endangered North Atlantic right whale was losing approximately 70% of its communication space to noise from ships. Sofie and her research group at the Northeast Fisheries Science Center in Woods Hole oversee the acoustic monitoring of marine animals in the Northwestern Atlantic Ocean documenting changes in distribution, real time detections of whale sounds and monitoring habitats through their soundscapes.

As their research continues, they strive to develop novel approaches to studying the ever-changing soundscapes of the Gulf of Maine and wider ocean providing information about the marine residents and human impacts to Sanctuary managers, fisheries managers, collaborators, and stakeholders.

Don Palladino, Massachusetts (In memorium)

The Herring River Restoration Project in Wellfleet, Massachusetts seeks to restore a 1,100-acre estuary that was cut off from tidal flow by the construction of a dike at the mouth of the river over 100 years ago. This is the largest tidal restoration project in the Northeast and will re-connect the river with the Gulf of Maine. Many people have contributed to this project but no volunteer more so than Don Palladino.

In 2008, the Herring River Restoration Committee struggled to keep up with its many needs. To help, Don co-founded Friends of Herring River, a non-profit organization with the purpose of promoting education, research and public awareness of the Herring River estuary; restoring the native environmental integrity of the river; ensuring habitat protection; and enhancing public access to the river. Friends of Herring River has now become critical to the success of the Project.

Don knew that the way to grow community support was to speak directly with citizens and educate them about the Project. With outreach as a top priority, he conducted many public meetings and over 100 individual meetings with local citizens, leading to increased public awareness of, and broad support for the Project. Don's outreach efforts were proven successful when Town Meeting voted overwhelmingly to support the river restoration project in 2017. Under Don's leadership, Friends of Herring River also raised over \$8 million to support project planning, design, and permitting, and has contributed over \$500,000 of in-kind match.

Don served as President of the Friends of Herring River from its founding in 2008 until his death in 2018. During that time, as an unpaid volunteer, he put in countless hours establishing the organization and helping support the project. He left the organization so strong that, even after his death, the Friends of Herring River is still vibrant and able to fulfill its mission. Don Palladino was an inspirational leader who left a lasting legacy, both environmental and in the people fortunate enough to have interacted with him for the benefit of the Town of Wellfleet and the entire Gulf of Maine.

Distinguished Service Awards

Distinguished Service Awards are presented to individuals who have made outstanding contributions toward protecting and conserving natural resources in the Gulf of Maine through exceptional service to the Gulf of Maine Council on the Marine Environment.

Heather Breeze, Nova Scotia

Heather Breeze served as a highly effective member of the Gulf of Maine Council's Working Group for many years. As co-chair of the Council's State of the Gulf Report, Heather helped increase understanding and awareness about some of the most pressing issues and challenges facing the Gulf of Maine. Through in-depth research, collaboration with teams of experts, and publication of resources, the State of Gulf report has raised awareness about important topics such as protecting fisheries, adapting to climate change, the value of watershed management, and emerging contaminants of concern.

Bruce Carlisle, Massachusetts

Bruce Carlisle from the Massachusetts Office of Coastal Zone Management provided leadership as former Chair of the Council during his tenure. Bruce helped to raise awareness and promote opportunities to share resources and tools that would help communities throughout the Gulf of Maine to become resilient and sustainable in the face of climate change. Bruce's expertise on regional challenges associated with sea level rise and climate change benefited coastal communities and managers at all levels.

Don Hudson, Maine

Throughout the past 25 years, Don Hudson provided invaluable support for the Council, from volunteering on the GOMC's Public Education Participation Committee, serving as a Council member representing the state of Maine, and finally as President of the Association of US Delegates to the Gulf of Maine Council on the Marine Environment. Don's enthusiasm, expertise and personal commitment helped foster international collaboration and lasting partnerships between the United States and Canada to address regional environmental issues in the Gulf of Maine.

Ann Rodney, Massachusetts

Ann Rodney from the US Environmental Protection Agency was a very active and effective member of the Council's Working Group for the past several years, sharing her insights and experience about outreach and education to help advance the Gulf of Maine Council's work. Ann was a major contributor to the Gulf of Maine Council's 25th Anniversary events helping to facilitate production of the publication – *Facing Change: Sustaining the Vitality of the Gulf of Maine Region*. This valuable resource has been distributed throughout the Gulf of Maine.

Jack Schwartz, Massachusetts

Jack Schwartz of the Massachusetts Division of Marine Fisheries contributed his expertise to the Council's Gulfwatch monitoring program and as an active member of the Working Group for many

years. Jack brought knowledge and thoughtful advice to Gulf of Maine Council's efforts to support sustainable fisheries in the Gulf of Maine watershed. He also helped raise awareness emerging contaminants and promote solutions to key environmental problems related to water quality, habitat and marine life.