

Maine Sea Grant and the Humanities:

Marine Science (and History and Art) for Maine People

by Catherine Schmitt

We must seek through a welding together of science, art, literature, engineering, medicine, law, public administration, and politics to develop a public which will homestead our new spaces in the sea...through an integrated interdisciplinary education in the sea-grant universities.

—Athelstan Spilhaus

The Maine Sea Grant College Program, a state-federal partnership program based at the University of Maine, is a science-based organization with an interdisciplinary approach to its mission of research, education, and outreach. Sea Grant works at the boundary of science and society, with a research portfolio dedicated to applied science. Sea Grant investigators address questions that are relevant to Maine communities. Communicating this relevance has demanded that outreach staff in particular incorporate the humanities into their work with Maine's coastal communities.

This philosophy can be traced to the origin of the Sea Grant concept. In the middle of the twentieth century, oceanographers and marine biologists, including Dana Wallace of Maine, saw a need for universities to do for fisheries and other marine resources what the land-grant concept had done for agriculture. In October 1966, President Lyndon Johnson signed the Pell-Rogers Sea Grant Colleges and Program Act, creating an Office of Sea Grant within the National Science Foundation. Sea Grant moved to the National Oceanic and Atmospheric Administration when that agency was created in 1970. The University of Maine has hosted Sea Grant since the first funds were awarded to the state in 1971.

While initial efforts focused on marine research and related resource development, it wasn't long before the program expanded beyond science to communications and community engagement (Abel and Goodwin 1998).

With the hiring of Kathleen (Lignell) Ellis as the first communications coordinator in 1981, writing became an important part of Maine Sea Grant's work.

Ellis, a poet, and graphic artist Majo Keleshian, hired in 1985, began a tradition of partnerships with Maine artists and writers. They demonstrated that fine art and creative writing could provide context, perspective, and interest to scientific information, while establishing a distinctive character to Sea Grant products and services.

Over the years, Sea Grant has employed underwater films, documentaries, radio programs, recipes, books, and poetry readings. We continue to work with (and provide financial support to) Maine-based artists such as Kim and Philippe Villiard of Boothbay Harbor, Wendy Turner (Kittery Point), Mimi Gregoire Carpenter (Cape Porpoise), Margaret Campbell (Harpwell), Kimberly Martul-March (Brunswick), and Isaac Wright (Belfast).

Like fishing and working waterfronts, visual and performing artists, writers, and musicians are integral to the cultural landscape of coastal Maine (Creative Economy Council 2006). Marine resources issues cannot be addressed outside of this landscape—or independent of their temporal context. And so history, too, is an important component of Sea Grant's work.

A recent significant investment in history is the Downeast Fisheries Trail, a network of 45 sites along the coastline of Hancock and Washington counties that demonstrate the fisheries heritage of Downeast communities (<http://www.downeastfisheriestrail.org/>). Many partner organizations and residents were involved in selecting which sites should be on the trail (and which should not be). The featured locations—from cod-drying stations on Mount Desert Island to the first federal fish hatchery to Wabanaki fishing weirs—not only record and document the rich culture and traditions of Maine communities, but also provide insights into the multitude of fish that once swam the waters of the Gulf of Maine.

Documenting the history of fishing communities has several goals. First among these is education and awareness of Maine's relationship to the sea and the significant loss of marine animal populations that has occurred over the last 200 years. Knowing that the

baseline of environmental conditions has shifted (we no longer consider a Gulf of Maine aplenty with giant cod normal) can help build support for ocean science and conservation (Pauly 1995). Recovery and restoration require that we know what we've lost and what assets remain.

But the Downeast Fisheries Trail is also about fisheries present. The Downeast Fisheries Trail builds on existing efforts to enhance tourism opportunities as an economic development initiative in the region, which includes the most economically depressed communities in Maine. The trail was informed by research conducted by Sea Grant marine extension associate Natalie Springuel in Newfoundland, where tourism has provided a means for communities devastated by the loss of cod fisheries (<http://www.seagrant.umaine.edu/extension/Newfoundland>).

A recent Sea Grant-funded study of four Maine fishing communities identified tourism as one way to diversify and strengthen coastal economies. Communicating the importance of fishing heritage and waterfront access to permanent residents, seasonal residents, and visitors can help maintain a community's identity as a fishing community, an identity tied to the resilience of individual fishermen and the fishing industry (Johnson, Henry, and Cameron 2014). (See Ettenger [2015] for further discussion of cultural tourism and the important role that can be played by local residents.)

The humanities are the keepers of "social memory," a key component of community resilience.¹ Social (or collective) memory links past individual and community experiences, for example with fisheries management practices and population declines, with present and future policies (Pillatt 2012). Social memory provides a wealth of ideas on how communities have responded to and adapted to changes in the past, and can be particularly important in times of crisis (Chiarappa and Szylvian 2009; Kofinas and Chapin 2009).

Winslow Homer's paintings recall a once-plentiful Gulf of Maine and related way of life. Poets keep alive the memory of the sardine canneries that once dominated the economy of many Maine fishing communities. Today, Sea Grant staff and students chronicle today's fishing practices and culture with audio and video recordings.² In 2013, Sea Grant launched *The Catch: Writings from Downeast Maine*, an annual literary journal produced in association with the Downeast Fisheries Trail.

Literature, history, and the arts activate social memory of relationships to nature, a strong motivation for ecosystem stewardship and sustainability (Kofinas and Chapin 2009). Without this motivation, what is the value of applied science that seeks to solve society's problems? In Maine, Sea Grant works for clean coastal waters, vibrant waterfronts, safe and sustainable seafood, and communities that are resilient in the face of change. To be successful, we need more than science and technology; we need the humanities, so that human communities remember the past, and can envision their future. 🐟

ENDNOTES

1. See <http://seagrant.umaine.edu/blog/community-resilience>
2. See: <http://www.seagrant.umaine.edu/oral-histories-alewife-eel>, Bolster (2012), Schmitt (2011).

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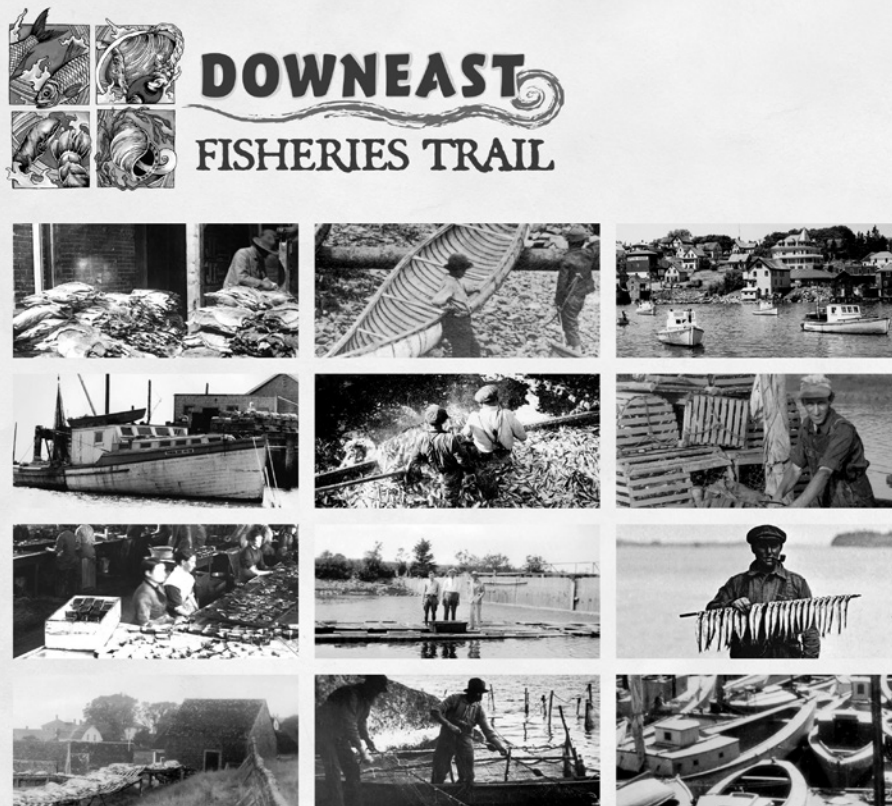
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