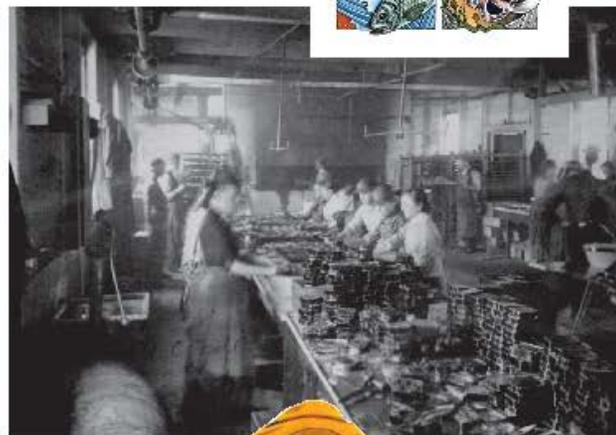


Downeast Fisheries Trail

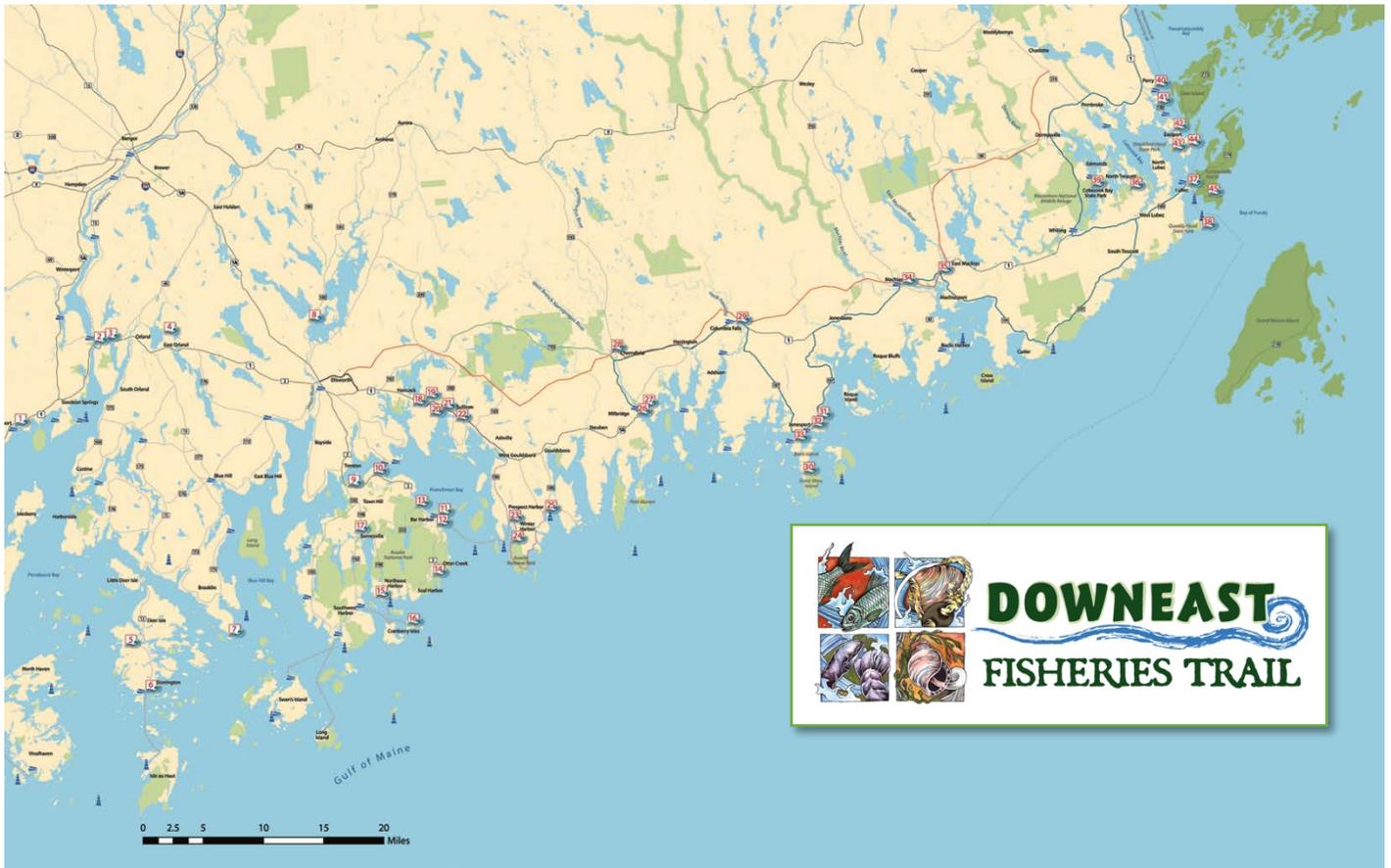
Celebrating the Fisheries Heritage
of Downeast Maine, Then and Now



5-Year Report • Spring 2017

Table of Contents

Downeast Fisheries Trail Map	1
About the Downeast Fisheries Trail	2
The importance of fisheries heritage in Maine	2
Components of the Trail: Who is the Downeast Fisheries Trail?	4
Trail coordination and funding.....	5
Telling the story	6
Map brochure	6
Website and social media	6
Interpretation	7
Presence at local events and venues.....	8
The Downeast Fisheries Trail as a resource	9
Lectures	9
Building a network: Downeast Fisheries Trail Celebrations.....	10
Collaborations	10
History of the Downeast Fisheries Trail	12
The Future Downeast Fisheries Trail	14
Appendix 1 – Interpretive Panels	16
Media coverage.....	19
Credits.....	19



Downeast Fisheries Trail Map indicating sites by numbers:

- | | |
|---|---|
| 1. Penobscot Marine Museum | 24. Frazer Point |
| 2. Penobscot Narrows Bridge Observatory & Fort Knox | 25. Prospect Harbor |
| 3. Bucksport Waterfront | 26. Milbridge Historical Museum |
| 4. Craig Brook National Fish Hatchery | 27. Milbridge Town Marina |
| 5. Deer Isle/Stonington Historical Society | 28. Cable Pool Park |
| 6. Maine Center for Coastal Fisheries (Formerly Penobscot East Resource Center) | 29. Pleasant River Hatchery (Formerly Wild Salmon Resource Center) |
| 7. Naskeag Point | 30. Downeast Institute for Applied Marine Research and Education |
| 8. Green Lake National Fish Hatchery | 31. Maine Coast Sardine History Museum |
| 9. Mount Desert Oceanarium | 32. Jonesport Historical Society |
| 10. Bar Harbor Town Park at Hadley Point | 33. Beals Heritage Center |
| 11. Bar Harbor Town Pier | 34. Bad Little Falls Park |
| 12. Abbe Museum | 35. Peter Gray Hatchery (Formerly East Machias Aquatic Research Center) |
| 13. Frenchman Bay Overlook, ANP | 36. Morong Cove |
| 14. Otter Cove | 37. McCurdy's Smokehouse |
| 15. Great Harbor Maritime Museum | 38. Quoddy Head State Park |
| 16. Islesford Historical Museum | 39. Cobscook Bay State Park |
| 17. Somesville Mill Pond | 40. Gleason Cove Park |
| 18. Taunton Bay Gateway | 41. Waponahki Museum and Resource Center |
| 19. Gordon's Wharf | 42. Carryingplace Cove |
| 20. Tidal Falls | 43. Shackford Head State Park |
| 21. Frenchman Bay Scenic Turnout | 44. Cobscook Bay Resource Center |
| 22. Long Cove | 45. Roosevelt Campobello International Park |
| 23. Henry Cove | |



About the Downeast Fisheries Trail

The Downeast Fisheries Trail connects 45 historic and active fisheries sites from Penobscot Bay to Passamaquoddy Bay that illustrate the region's maritime heritage. Sites include fish hatcheries, aquaculture facilities, fishing harbors, clam flats, processing plants, historical societies, community centers, and waterfront parks. Marine resources sustain the culture and economy of Downeast Maine. The Downeast Fisheries Trail builds on these local resources to strengthen community life and the experience of visitors. This report was compiled in honor of the Downeast Fisheries Trail five-year celebration at the Schoodic Institute in May 2017. The Schoodic Peninsula is emblematic of the whole Downeast Fisheries Trail region and can serve as a model for communities who have had to reinvent themselves while successfully building on their fisheries and community heritage. The changes along the Schoodic Peninsula,

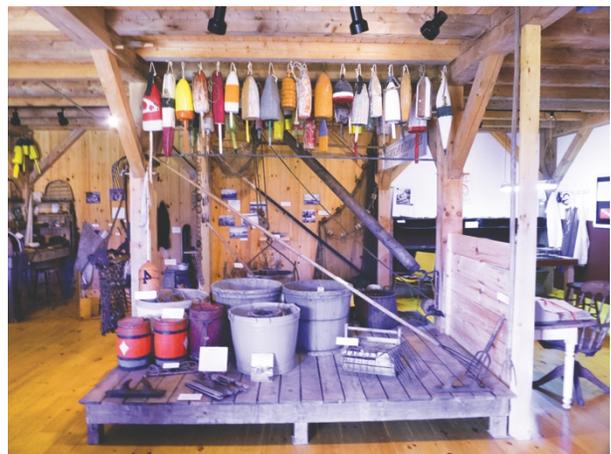
including the closure of the nation's last sardine cannery and opening of a lobster processing plant at that same site, have illustrated larger trends in the fishing industry, as well as a need to identify ways to stimulate income outside of fishing. Tourism, along with the artists and outdoor adventurers who are part of the tourism economy, is an important and growing factor on the Peninsula, but if the annual Lobster Boat races in Winter Harbor are any indication, fisheries heritage still holds an important place in this community's heart. And this is exactly the confluence of fisheries and tourism that the Downeast Fisheries Trail seeks to celebrate now and into the future.

The importance of fisheries heritage in Maine

The Downeast region relies on the sea. Proportionally, residents of Washington and Hancock Counties are among the most reliant on fishing compared to most coastal counties in the country. Though lobster has been the biggest fishery by far in recent years, Downeast fishermen harvest scallops, clams, lobsters, crabs, mussels, elvers (juvenile eels), alewives, herring, urchins, marine worms, seaweed, and other species depending on season, year, and conditions. Hancock and Washington Counties usually rank second and third in the state for the volume of clams and lobster harvested each year and the waters of both counties are among the state's most important for both finfish and shellfish aquaculture, according to the Maine Department of Marine Resources. Several fish hatcheries in the region raise native Atlantic salmon to support recovery of this endangered species in Maine rivers. Historically, the two counties were home to more than 60 sardine packing plants, the last of which closed in Prospect Harbor in 2010, and herring weirs were once common in many bays Downeast.

The scale of changes facing fisheries in communities today is even greater than the decline of the sardine industry. For example, up until the 1980s the fishery for cod and other groundfish generated income for hundreds if not thousands of local families, but that fishery has declined to the point where now groundfishing supports only a few families and has almost disappeared. Most fishermen rely on lobster to make a living these days, as these landings continue to break annual records. As scientists and managers research ways to keep the catch high, communities are concerned about their fate in a future when lobster might not be as plentiful.

Downeast Maine's once-remote coastal communities are popular for second home development, triggering rising land values, which in turn make it hard for fishing families to hold on to their waterfront property. Research conducted by the Island Institute in the mid-2000s showed that nearly 70% of Maine's working waterfront is privately owned and subject to conversion to other uses. Though communities often welcome newcomers and their accompanying economic and cultural diversity, they are also eager to offer opportunities for new residents to develop connections with local heritage. The Downeast Fisheries Trail is an important community development initiative that supports cultural pride and community resilience.



Components of the Trail: Who is the Downeast Fisheries Trail?

The heart of the Downeast Fisheries Trail is the 45 sites (see inside cover) where people can experience and learn about the region's fisheries heritage from diverse perspectives, including:

- | | |
|---------------------------------|-------------------------|
| Museums | An oceanarium |
| Local visitor centers | Town parks |
| Working waterfronts | Town piers |
| A fish processing plant | Scenic overlooks |
| A herring smokehouse | A national park |
| Fishermen's memorials | An international park |
| Fish/shellfish hatcheries | State parks |
| Historical societies | Scenic byway sites |
| Community fishery organizations | Historical sites |
| Education centers | Nonprofit organizations |

The Trail is complex. Each site is managed or cared for by at least one entity, sometimes more, and some manage more than one site. At least 30 towns in Hancock and Washington Counties have a site, and at latest count, at least 47 organizations were connected to sites on the Trail. These managers, site contacts and volunteers represent the Downeast Fisheries Trail to the public.



Trail coordination and funding

The current coordinating committee includes Maine Sea Grant, Downeast and Acadia Regional Tourism, Sunrise County Economic Council, the Lobster Institute, Penobscot Marine Museum, and Washington County Council of Governments, with staff support provided by Maine Sea Grant. New members are welcome.

The Trail has received direct funding or collaborative project support from many institutions. This support has come in the form of grants (in addition to those listed above, Maine Sea Grant awarded the project \$5,000 in 2012, and DART awarded the project \$3,535 with \$4,250 in cash match from partners in 2014), interpretive panel production and installation costs (in the multiple thousands provided by Bureau of Parks and Lands, Maine Department of Inland Fisheries and Wildlife, the Town of Bar Harbor, The Downeast Salmon Federation, DART, and Roosevelt Campobello International Park), as well as extensive staff time provided by Maine Sea Grant, printing of map brochure cash contributions, and in kind support for GIS mapping, graphic design, web development, and more, from the following organizations:

Maine Community Foundation	Downeast Salmon Federation
DownEast Acadia Regional Tourism	The East Penobscot Bay Association
Maine Sea Grant	Diadromous Species Restoration Research Network
Maine Bureau of Parks and Lands	College of the Atlantic (GIS lab)
Maine Department of Inland Fisheries and Wildlife	Schoodic Institute
Maine Office of Tourism	NOAA Preserve America Initiative
Vacationland Resources Committee of Downeast	Lobster Institute
Resources Conservation and Development Council	Sunrise County Economic Council
Downeast Resource Conservation and Development Council	Roosevelt Campobello International Park
	Washington County Council of Governments

The Trail committee has also benefited from interns from Schoodic Institute and University of Maine, who wrote for the website, conducted oral histories, and staffed events.

Telling the story

The Downeast Fisheries Trail serves as a mechanism to capture and share stories of Downeast Maine’s fisheries heritage, through multiple media and formats.

Map brochure

Sea Grant produced the Downeast Fisheries Trail map brochure, with help from College of the Atlantic GIS Laboratory in 2012. Nearly 30,000 maps have been distributed via the 45 DFT sites, the organizations that manage the sites, coordinating committee members, funders, all seven Maine visitor centers managed by the Maine Tourism Association (along the I-95 corridor), local visitor centers, chambers of commerce, historical societies, academic partners, restaurants, retail shops, inns, and museums throughout the Maine coast, as well as at conferences and special events.

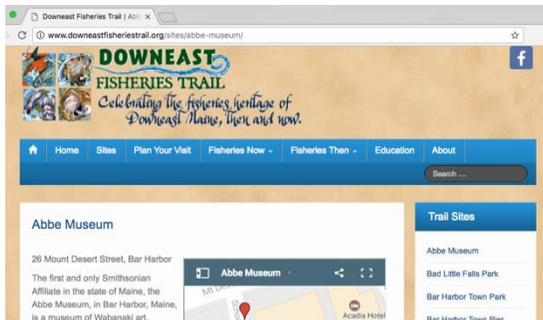


Website and social media

Data from Google Analytics for the last three years (through early April 2017) shows an average of 2,423 website visitors per year. Sixty percent arrived at the website via an Internet search for related content; 84 percent of the site’s users are new. Twenty-three percent come from referrals from other pages, likely DFT partner websites. The Fisheries Then and Now pages (which describe historical and contemporary fisheries by species) make up five of the ten most frequented pages from search engine results. These numbers imply that DFT is playing an important role in satisfying demand for fisheries information as well as directing people to the Trail’s 45 sites in the region. Finally, more than 40% of the website traffic comes from Maine.



An analysis of Facebook traffic implies even higher percentages of followers being residents. As of April 25, 2017, the DFT page had 466 followers: 433 from the U.S., 21 from Canada (almost all from New Brunswick), and the rest from overseas. Within the U.S., the majority is from Maine, and most of those are from the Downeast region. This implies that the Facebook page is an important resource for residents who value the region’s fisheries heritage.



The Downeast Fisheries Trail website features maps and descriptions of the 45 sites, including in many cases details on local fisheries history. The website also contains articles about past and present harvesting and community use of specific species, including cod, lobster, and oysters.

Both print materials and the website make extensive use of historical and contemporary photographs. For

access to historical images, the collaboration of the following organizations has been invaluable: Penobscot Marine Museum, Maine Memory Network, Maine Folklife Center, University of Maine Fogler Library, Northeast Historic Film, NOAA Library, and local historical societies and libraries. All of the written materials related to the Downeast Fisheries Trail are also archived at Fogler Library at the University of Maine

Interpretation

Interpretive panels and kiosks, constructed information displays at outdoor locations along the trail, are a key component of outreach. To date, the Trail features 19 interpretive panels: three were installed during the initial phase of the Trail and the rest were produced since 2012.

[See Appendix 1 for a full listing of panels](#)

Interpreting fisheries heritage at Roosevelt Campobello International Park

Roosevelt Campobello International Park is the easternmost and only Canadian site on the Trail. The only park in North America administered jointly by two nations, Roosevelt-Campobello is located in an historical fishing region at the border between Maine and New Brunswick, Canada. The Park has limited staff, and relies on volunteers. Formal interpretation concerning the region's fisheries history, aquaculture, marine economy, indigenous peoples, and President Roosevelt's love of the sea was lacking. The DFT coordinating committee, under the leadership of Maine Sea Grant, worked with the Park to develop eight interpretive panels in time for the Park's 50th anniversary (see Appendix I). Park managers report that the panels have increased the quality of interpretation at the site, helping to engage 147,000 annual visitors with the region's fisheries heritage, the industry's role in international relations under the Roosevelt presidency, and the emergence of salmon aquaculture as a significant local economic driver.



Presence at local events and venues

The DFT traveling display is a table-top exhibit with maps, dozens of historical photos with accompanying legend, and materials relevant to the particular display location. The display has been exhibited at the following events:

Maine Blueberry Festival
Lobster Festival
Stonington Fishermen's Day
Washington County Hall of Flags
Day in Augusta
East Machias River Day
Beals Heritage Center Open House
Cobscook Bay Resource Center community
barbecue
Deer Isle – Stonington Historical Society
Boat Show
Downeast Institute for Applied Marine
Research and Education Field Day
Waponahki Museum Indian Day celebration

Maine Boats, Homes & Harbors Show
Winter Harbor Lobster Festival and Race
Craig Brook Fish Hatchery (winter exhibit)
Bucksport Bay Festival
Cherryfield Days
Machias Blackfly Ball
Eastport Salmon Festival
Smelt Fry, Columbia Falls
Poets SPEAK!, Bangor Public Library
Lubec Campobello International
Marathon Expo
Ellsworth Public Library



The Downeast Fisheries Trail as a resource

Through extensive collaboration, research, and outreach, the Downeast Fisheries Trail has developed a series of methods and materials that can be used by others to protect fisheries heritage here in Downeast Maine, but also elsewhere. Resources in the form of collected fisheries stories and information have been shared through lectures, articles, and even fisheries-related tours. At the national scale, the Downeast Fisheries Trail, including its events, materials, and maps, has served as model or inspiration for similar fisheries heritage efforts outside of Maine.

Lectures

Coordinating committee members and volunteers have delivered presentations about the Downeast Fisheries Trail and fisheries history and heritage for the following audiences:

Maine Fishermen's Forum

Acadia National Park interpretive staff

Acadia National Park Interwoods Seminar

Acadia Internship in Regional Conservation and Stewardship

Destination Cherryfield

Hancock County Cooperative Extension

Jonesport Historical Society

Pembroke Historical Society

Working Waterfronts and Waterways National Symposium on Water Access

Maine and The Mortal Sea Conference

Society for Human Ecology Conference

University of Maine Humanities Initiative Seminar

Humanities and Public Policy Summit in Augusta

Great Lakes Fisheries Heritage Trail Conference

Two Nation Vacation Industry Leaders Educational Tour and Advisor's meeting

American Fisheries Society Annual Meeting

Experience Maritime Maine bi-annual stakeholder meeting

Penobscot Watershed Conference

Saltwater Connections Winter Assembly, North Carolina

Maine Sea Grant community engagement workshop

The Catch: Writings from Downeast Maine

The Catch: Writings from Downeast Maine (catchjournal.org) is a place-based, online literary journal published in association with the Downeast Fisheries Trail. The Catch features poetry, fiction, and nonfiction connected to sites on the Trail or inspired by the fisheries heritage of the region. Five volumes have been published, featuring the works of dozens of prose and poetry writers and photographers. All share a connection to the places on the coast of Downeast Maine and *The Catch* provides a venue for local literature along the Trail.

Building a network: Downeast Fisheries Trail Celebrations

The coordinating committee of the Downeast Fisheries Trail hosts occasional events and celebrations to bring together staff and volunteers of the 45 Trail sites (as well as Trail friends) to promote unity and learning about each other and our region.



The 2012 (re)launch of the Trail was marked with installation of interpretive panels and ribbon cutting celebration at Cobscook Bay State Park. In 2013, the Downeast Fisheries Trail Celebration was a sharing of stories, poetry, and imagery from many Trail sites and was held in conjunction with the Downeast Smelt Fry (hosted by Downeast Salmon Federation, one of the Trail's original sites). In 2015, the DFT Celebration was in honor of the unveiling of eight new interpretive panels at Roosevelt Campobello International Park. In 2017, Downeast Fisheries Trail partners

gathered on the Schoodic Peninsula, in partnership with the Schoodic Scenic Byway. These celebrations foster connections between trail site managers and volunteers, enabling them to better cross-promote the Trail and their site's respective effort.

Collaborations

The Downeast Fisheries Trail serves as a collaborator or resource for other initiatives, providing information, capacity, inspiration, or other support.

The Trail in tourism-related collaborations

Experience Maritime Maine

Bold Coast Scenic Byway

Schoodic National Scenic Byway

Schoodic International Sculpture trail

Two Nation Vacation

Maine Maritime Museum, "Lobstering and the Maine Coast Exhibit"

Maine State Museum

Downeast Rapid Transit art project

In addition, the Downeast Fisheries Trail has been featured in custom tours for audiences including Family Nature Summit, Two Nation Vacation Industry leaders tour, and the Marine Pathways program at Deer-Isle Stonington High School. Tours present a growth potential for the Trail into the future.

The Trail as model or inspiration for related initiatives

Herring Gut Learning Center

Oyster Trail of Maine

Eastern Maine Skippers Program

Island Readers and Writers

University of Maine Humanities Initiative

The Trail as a resource for fisheries or community related initiatives

Downeast Fisheries Partnership

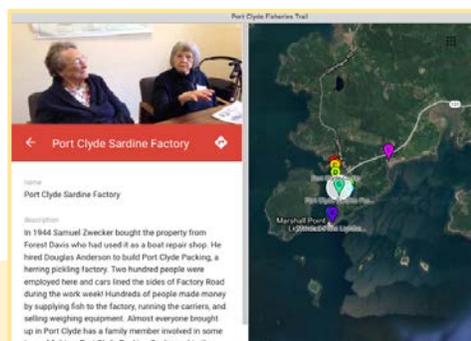
Frenchman Bay Partners

The Trail as model or inspiration for initiatives outside of Maine Trail

Outer Banks Heritage Trails

Rhode Island fisheries signage project

National Humanities Alliance “Engaged Humanities: Model Programs for Cultivating Vibrant Humanities Communities” nhalliance1.org/storymap/



Port Clyde Fisheries Trail

St. George School seventh graders, their teachers, and advisors at Herring Gut Learning Center created the Port Clyde Fisheries Trail, including oral histories and a community map of historical and contemporary fishing heritage sites, all modeled on the Downeast Fisheries Trail. As described in a news story posted in 2015 on the Herring Gut Learning Center website, the project was intended “to explore the past, present, and future of the fishing industry in Port Clyde. Inspired by the Downeast Fisheries Trail map, students worked to create their own map of Port Clyde, identifying historic and present day sites that have a connection to our rich fishing heritage and culture. As a part of the project, students interviewed and recorded oral histories from members of the community to collect stories of their work in the groundfishing, lobstering, sardine, and aquaculture industries. Professional oral historian, Meghan Vigeant of Stories To Tell, taught the students proper use of recording equipment and how to conduct thoughtful interviews in preparation for this part of the project. A digital map, including site descriptions, oral histories, and student photography is available online at Port Clyde Fisheries Trail Map. Paper copies of the map are available at Herring Gut Learning Center, the Jackson Memorial Library, and other community locations in St. George.” herringgut.org/news/view/port-clyde-fisheries-trail

History of the Downeast Fisheries Trail

The original Downeast Fisheries Trail was launched in 2000 in Washington County, coordinated by Sunrise County Economic Council and Washington County Promotions Board with intern support from Quebec Labrador Foundation and a steering committee that included Maine Aquaculture Innovation Center, Maine Aquaculture Association, University of Maine at Machias, Beals Island Shellfish Hatchery, Columbia Falls Salmon Hatchery, Town of Milbridge, Town of Machias, Town of Eastport, Lubec Landmarks, WCTC Marine Trades Center (Boat School), Lubec High School, Quoddy Maritime Museum, and UMaine Cooperative Extension.

According to Jennifer Peters of Sunrise County Economic Council, the original Downeast Fisheries Trail was created “because of a series of ‘town meetings’ where people informed us that they were concerned about losing the history of Washington County.” Originally, fourteen sites were marked on a trail map printed in brochure format and shared at those sites, through chambers of commerce, and other venues. Four interpretive panels covering marine ecology of the Gulf of Maine and fisheries history were installed at the Milbridge Town Pier, Cobscook Bay (at Carryingplace Cove), Machias River (at Bad Little Falls Park) and Lubec. The first three are still standing. Each of these signs had waterproof containers to hold brochures and each was cared for by a Quebec-Labrador Foundation intern or local volunteer group, including a Boy Scout troop.

The original trail was funded by: Maine Aquaculture Innovation Center, Maine Coastal Program and State Planning Office, Maine Tourism Marketing Partnership Program (Maine Office of Tourism), Maine Community Foundation, and Sunrise County Economic Council. In a 2000 report to the Maine Tourism Marketing Partnership, Trail organizers wrote, “The Downeast Fisheries Trail is an educational trail that links together fish hatcheries, aquaculture facilities, fishing harbors, clam flats, processing plants and public places in Washington County in an effort to educate residents and visitors about the importance of County’s marine heritage and the role of marine resource to the area’s economy. It is an exciting project that focuses on the unique attributes of one of the state’s most remote and scenic regions.”

Limited funding and staff capacity contributed to the Trail entering a period of stasis in the mid-2000s. It existed on maps, interpretive panels, and a few partner websites, but no single entity or partnership was focused on its growth or development. During that time, the Vacationland Resources Committee (VRC) of the DownEast Resource Conservation and Development Council was in the process of updating a regional plan for sustainable tourism. The DESTINY plan (DownEast Sustainable Tourism Initiative) was a collective vision among many organizations in the region seeking to foster economic development through sustainable tourism via education, conservation, cultural preservation, and collaboration. An important goal identified in the DESTINY plan was the revival of the Downeast Fisheries Trail.

In 2009, VRC partners began working to revive and extend the Downeast Fisheries Trail into a bi-county educational product that preserves the region’s rich natural and human heritage while taking advantage of the growing market for tourism that truly connects visitors to place. The bi-county approach reflected VRC’s regional nature, Downeast Maine’s historical and cultural framework, and the region covered by DART (DownEast Acadia Regional Tourism), one of Maine’s eight tourism regions. Though the VRC itself eventually lost staff capacity due to budget cuts, many partners were committed to making the expanded Downeast Fisheries Trail a reality.

A new Downeast Fisheries Trail coordinating committee formed, including: Sunrise County Economic Council, Maine Sea Grant, the Lobster Institute, Washington County Council of Governments, DownEast Acadia Regional Tourism, Penobscot Marine Museum, and the Diadromous Species Restoration Research Network. The project received grants from Maine Community Foundation (\$7,480 awarded in 2009) and DownEast and Acadia Regional Tourism (\$5,000 awarded in 2011), as well as staff capacity from University of Maine Sea Grant, to revive the trail in Washington County and expand it into Hancock County. The initial scope of these grants was to seek community input about potential sites for the Trail, build relationships with site managers, map the trail, and develop materials. Organizers also considered long term maintenance of the Trail, new interpretive signage, and other ideas for celebrating and highlighting the region's fisheries heritage.

To identify potential sites for the Downeast Fisheries Trail and to explore other ideas for celebrating fisheries heritage in the region, a series of regional focus group meetings were held during spring 2010 (University of Maine at Machias, Penobscot East Resource Center in Stonington, Schoodic Arts for All in Winter Harbor, and the Bar Harbor Whale Museum), as well as a larger meeting at the Maine Fishermen's Forum. Partners also initiated a survey and direct conversations with multiple stakeholders in the region. More than 100 people provided input and generated important themes. Meeting participants felt that the project should highlight historical and current fisheries heritage, and promote activities for all ages. The target audiences should be both residents and tourists. The types of sites on the Trail should be diverse and some places might be better left off the map.

Participants expressed a desire for unified signage that interpreted local fisheries stories, and sites with existing exhibits should also be featured. The project needed a website with site descriptions, images, historical fisheries stories, and educational materials, but a printed map was also critical. Participants suggested models from other regions, and suggested that webcams, smartphone apps, oral histories, geo-caching, access to the coast, and events could all be part of the Trail. Finally, they emphasized connectivity to related projects. For example, the Downeast Fisheries Trail was among the first thematic trails in the region but was by no means the only one, and people wanted to see mutual benefits between the Trail and for example, the regional Scenic Byways and other initiatives.

A new set of goals emerged out of this process, though they stayed remarkably true to the Trail's original intent.

1. Support fisheries economy and industry
2. Foster coastal community revitalization and community pride
3. Encourage tourism economic development
4. Provide educational opportunities for the next generation

Finally, on June 21, 2012, about 50 people gathered at the Edmunds Boat Launch at Cobscook Bay State Park to celebrate the (re)launch of the Downeast Fisheries Trail. A symbolic ribbon-cutting unveiled one of three new interpretive panels. New maps (designed by College of the Atlantic GIS students and Maine Sea Grant) pointed to 45 sites now on the Trail. A website and Facebook page were launched, and a traveling exhibit of fisheries photos hit the road at the first of more than a dozen summertime events and festivals.



The Future Downeast Fisheries Trail

Since the Downeast Fisheries Trail was initiated nearly 20 years ago, the concept has grown significantly from 14 sites in Washington County to 45 sites in Washington, Hancock, and Waldo Counties in Maine, and Charlotte County in New Brunswick, Canada. The reasons for the Trail, however, have remained constant over the last two decades, as has the commitment to stay true to the original intent: the audience is local as much as visitors, the scope is current as much as historical.

Important changes have occurred within Maine's fishing industry in the last 20 years, but fisheries and marine resources, including aquaculture, continue to play a central role in Downeast Maine's economy and culture. Many people still rely on the sea for their living, and many residents and visitors want connections to this way of life. The need for a project that links our region's fisheries past, present, and future with residents, students, and tourists is as important now as it was two decades ago. Perhaps even more so.

Downeast Maine has emerged as a leader in its focus on fisheries restoration. Residents and local organizations (many of which are on the Trail) lead the way in developing community fisheries management programs, opening and maintaining diadromous fish passage, restoring critical habitats like scallop beds, exploring ways to grow new species to market, and hosting events that celebrate fish and shellfish. It is no surprise that it is in Downeast Maine that New Year's Eve is celebrated with a Sardine Drop! (We can thank our friends at the Tides Institute and Museum of Art in Eastport for launching a new tradition steeped in fisheries history.)

In the community meetings held in 2010 prior to the re-launch of the Trail, participants emphasized that this project should and could be “so much more than just dots on a map.” A map was produced (it is a trail, after all), but those instructions also inspired an array of stories about our region’s heritage captured and told through signs, displays, oral histories, poetry, articles, and events.

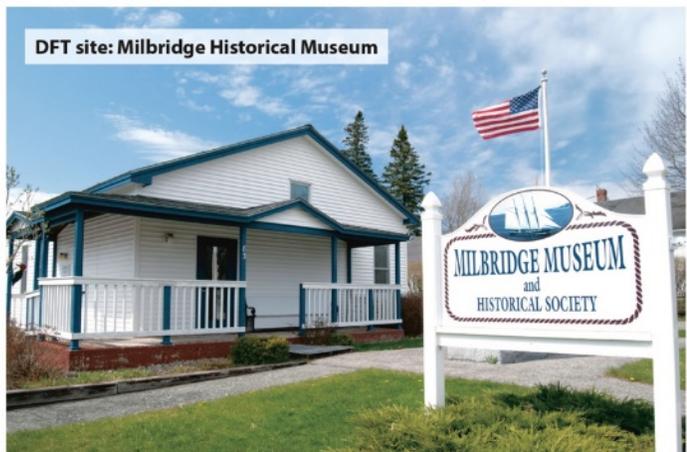
As we collectively enter the Trail’s next chapter, we are looking toward new projects and ways to tell the story of fisheries heritage in Downeast Maine. We will be asking some new questions and returning to ideas that have come up in the past, such as is it time to:

- Add sites to the Trail?
- Add mini local trails?
- Create education programs related to the Trail?
- Foster community development through the Trail?
- Form new Trail-linked partnerships?
- Emphasize seafood access through the Trail?
- Develop Downeast Fisheries Trail tours and itineraries?
- Use new technologies to share stories, like podcasts and story maps?
- Keep and grow our core programs of the last 5 years, including signs, displays, oral histories, poetry, articles, and events?

The people and organizations listed throughout this report (and its appendices) will help answer these questions and take the Downeast Fisheries Trail into **the** next chapter. Please join us!



DFT site: Frenchman Bay Scenic Turnout



DFT site: Milbridge Historical Museum

Appendix 1 – Interpretive Panels

Trail site with DFT interpretive panel	Panel topics and partners in production
Roosevelt Campobello International Park	<p>Eight panels, in partnership with RCIP (See text for more details on this project).</p> <p>The Last Lightkeeper Roosevelt History on Passamaquoddy Bay Salmon Aquaculture Fisheries Heritage Ecology of the Bay Passamaquoddy People Research and Learning Opportunities Downeast Fisheries Trail</p>
Bucksport Waterfront	A Port With a Fishing Past. Partnership with NOAA Fisheries.
Bar Harbor Town Park at Hadley Point	Two panels. Welcome to Hadley Point (Shellfish, red tide, and working waterfront topics); Hadley Point Eelgrass Restoration. Partnership with Bar Harbor Marine Resources Committee.
Peter Gray Hatchery (formerly East Machias Aquatic Research Center)	Reconnecting Habitat, Restoring Migrations. Partnership with Downeast Salmon Federation.
Pleasant River Hatchery (formerly Wild Salmon Resources Center)	A Meeting Place for Fish. Partnership with Downeast Salmon Federation.
Morong Cove	Diversity Created by the Tides. Partnership with Maine Department of Inland Fisheries and Wildlife.
Shackford Head State Park	Aquaculture’s Place in a Working Harbor. Partnership with Maine Bureau of Parks and Lands.
Cobscook Bay State Park	Access to Inner Cobscook Bay. Partnership with Maine Bureau of Parks and Lands.
Machias at Bad Little Falls Park	The Machias River. Original sign installed in 2000.
Carryingplace Cove in Eastport	Cobscook Bay. Original sign installed in 2000.
Milbridge Town Marina	The Cold Coast. Original sign installed in 2000.

Ecology of the Bay

At the mouth of the St. Croix River, Passamaquoddy Bay lies along the border of Downeast Maine and coastal Charlotte County, New Brunswick.

Passamaquoddy Bay is influenced by the extensive bayside tides and strong currents that bring nutrients from the deep ocean into the bay, creating a rich feeding ground for fin, mackerel, and herring, and the endangered North Atlantic right whale. Whiting as well as blacktip sharks and a diverse array of sea birds such as black-legged Kittiwakes and red-necked phalaropes feed on zooplankton, fish and fish larvae. The most common other birds that frequent the farther reaches of the Bay, such as great shearwaters and Wilson's storm petrels.

Off Campobello Island at Friar Roads, and the Lubec Narrows, harbor porpoises and harbor seals can be seen in the tidal current as they search for fish, crabs, and urchins.



Écologie de la baie

À l'embouchure de la rivière Ste-Croix, la baie Passamaquoddy marque la frontière entre le Downeast Maine et la région côtière du comté de Charlotte, au Nouveau-Brunswick.

La baie Passamaquoddy subit l'influence des immenses marées qui l'envahissent. Deux fois par jour, de puissants courants forts qui charrient des nutriments du fond de l'océan jusque dans la baie de Fundy. Ce brassage crée des eaux riches en nourriture pour le morue commun, le petit merlu, le merlu à l'écluse et la bolène noire de l'Atlantique Nord, une espèce en voie de disparition. Les bolènes, les requins blancs et divers autres poissons de mer, tels que la moule à deux valves, le crabe et le homard, se nourrissent de zooplankton, de poissons et de larves de poissons. Ces proies attirent aussi d'autres oiseaux qui fréquentent



les eaux de la baie, notamment le puffin majeur et l'écaille de Wilson.

Au large de l'île Campobello, dans les passages Friar Roads et Lubec Narrows, le mersouin commun et le phoque commun chassent dans le courant de marée à la recherche de poissons, de crabes et d'oursins.



Black-legged Kittiwake
Mouette à deux pattes



Great Shearwater
Petit merlu



Northern Gull
Mouette à bec cassé



Red-necked Phalarope
Phalarope à gorge rouge



North Atlantic right whale
Mersouin commun

Welcome to Hadley Point



The water surrounding Hadley Point, the northern reaches of Frenchman Bay, is habitat for diverse wildlife, including bald eagle, osprey, common loon, common loon, several species of gulls, harbor seals, and harbor porpoise. Hadley Point is an important feeding ground for migrating songbirds and winter seabirds, including scoters and long-tailed ducks.

At low tide, the water exposes extensive mudflats that are home to marine animals including clams, mussels, worms, snails, and crabs. Shellfish and worm harvesters are often seen working the flats, and aquaculture farmers and recreational boaters use the Hadley Point ramp.

Stay Legal, Stay Healthy!

At some times during the year, especially after heavy rains or in the summer when harmful algal blooms (red tides) are present, clams and other species may become too contaminated to eat safely. This is a serious and potentially life-threatening concern. Always call the DMR hotline to check safety status of eating shellfish before collecting (1.800.232.4733) or check for updated map of area 64-A, maine.gov/dmr/rm/public_health/closures/papcloves.htm.

Soft-shell Clams (*Mya arenaria*)

are named for their relatively thin shells, which are easily crushed. A clam uses its "foot" to burrow 3.5 inches into the mud, and reaches to the surface with a "neck" or siphon, a specialized feeding tube that allows the clam to take in seawater and filter out small, free-floating organisms. At low tide, the siphon holes are visible, and below each one is a clam. Soft-shell clams at Hadley Point take at least three years to reach the 2-inch minimum legal size for harvesting. Clams reproduce by releasing gametes in the water during the late spring and summer, and the larvae develop in the ocean for several weeks before settling on the flats. Once they arrive on the flat, the mobile seed clams live on the top of the mud for a short time until finally burrowing below the surface to live as an adult. Edgemoor in Frenchman Bay is an important habitat for seed clams.

Harvesting Clams, Mussels & Worms

Soft-shell clams are usually abundant at Hadley Point and can be harvested in "open" areas (see map) with a license. Clamming is done with a special clam rake. Clams that are too small to be legally harvested (less than 2 inches long) need to be put back into the mud with their siphon ("neck") pointed up to ensure their survival. Clam populations are monitored yearly. They are vulnerable to overharvesting and if populations fall too low, the Bar Harbor Marine Resources Committee closes the flats to harvesting to allow this important resource to recover. Licensed harvesters are allowed one peck (2 gallons) of legal-sized clams per day. Digging clams without a town shellfish license is a crime with a minimum fine of \$300.



The blue mussel (*Mytilus edulis*) can also be found at Hadley Point. Individuals can harvest up to two bushels (8 gallons dry) of mussels per day without a license. Only harvest mussels longer than two inches. There is also a mussel aquaculture lease nearby, where the mussels are grown on the sea floor. Individuals can harvest 125 worms per day for personal use (bait, etc.). Larger quantities of these and most other marine species require a license.

Clam harvesting licenses can be acquired at the Bar Harbor town office, 97 Cottage Street, 207.288.4098. Town of Bar Harbor Marine Patrol / Shellfish Warden Office: 207.288.5571 or pager 207.288.3391. Maine Marine Patrol Office 207.667.3373. Hadley Point is on the Downeast Fisheries Trail, DowneastFisheriesTrail.org



PLEASE clean up after your dog. Dog waste can cause clam flat closures due to unhealthy pollution.

The Last Lightkeeper Le dernier gardien de phare

Angus Newman • 1893-1967

An Angus Newman is a member of Downeast Maine. He was the last lightkeeper to serve the 100-foot-tall Campobello Island Light. He was born in 1893 in New Brunswick, Canada, and moved to Campobello Island in 1912. He worked as a lightkeeper until 1967, when the light was automated. He is remembered for his dedication to the job and his love of the island.

Common on just (Island) New Brunswick. Lorsque les températures ont baissé, les poissons se rassemblent en bancs à Wallingpool et marchent jusqu'au phare.

En 1963, Angus Newman a été nommé le dernier gardien de phare de Campobello. Il a travaillé au phare jusqu'en 1967. Puisque le phare a été automatisé, il n'y a plus de gardien de phare. C'est un monument à Angus Newman.

Downeast Fisheries Trail | Roosevelt Campobello
DowneastFisheriesTrail.org | fdn.net

Reconnecting habitat, restoring migrations

Atlantic salmon, a valuable seafood, are raised from eggs in a freshwater hatchery. The hatchery is a key part of the salmon aquaculture industry. The hatchery is located in a beautiful area with views of the ocean and mountains. The hatchery is a great place to visit and learn about the salmon industry.

Wild Atlantic salmon (the same species, *Salmo salar*) are endangered in the U.S. and closely managed in Canada. They swim past the Gulf of St. Lawrence and fish migrations between the sub-Arctic waters of Greenland and spawning rivers of northeastern North America.

Salmon aquaculture

Salmoniculture



The black circles on the water are floating cages, or pens, for raising fish. The pens are made of plastic and are anchored to the bottom. The fish are raised in the pens until they are ready to be harvested.

Les cercles noirs que vous voyez dans l'eau sont des cages flottantes, ou pens en plastique, où se trouvent les poissons. Les cages sont faites de plastique et sont ancrées au fond. Les poissons sont élevés dans les cages jusqu'à ce qu'ils soient prêts à être récoltés.

A meeting place for fish

The Pleasant River ends its 44-mile journey here at Columbia Falls. The convergence of land, river and sea creates a rich habitat for many animals, including fish such as alewives, Atlantic salmon, and American eels. Today the Wild Salmon Resource Center—formerly a hydroelectric plant that drew power from a dam across the falls—functions as a conservation fish hatchery and hub for watershed education.

The rainbow smelt is another fish that returns here from coastal waters to spawn. Local people have relied on smelt as a traditional food for centuries. In early spring, smelt are netted on the incoming tides and cleaned in the small camp along the shore. The Pleasant River estuary is one of the last places on the East Coast where a sustainable smelt fishery is still possible.



Rainbow smelt are slender, silvery fish about six to eight inches long, with dark backs and multi-colored, shimmering sides. They migrate into estuaries from the ocean each winter and spawn in the spring.



Labels marked boxes of smelt that were shipped throughout the region during the 19th and early 20th centuries.



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Media coverage

Downeast Fisheries Trail has appeared in the following publications

The Washington Post	I4u.com “Daily news and trends for the geek mind”
Portland Press Herald	Maine Woods Consortium Newsletter
Bangor Daily News	Salarius, Maine Sea Grant Blog
Kennebec Journal	Smallscales, a blog of the Nova Scotia Ecology Action Center
Ellsworth American	Frenchman Bay Partners News
Machias Valley News	National Sea Grant Sustainable Coastal Community Development News
Working Waterfront	National Sea Grant College Program online news
Fishermen’s Voice	Maine, a Moon Handbook Travel Guide
Maine Biz	Maine, An Explorer’s Guide
The Free Press	Maine Coastal Public Access Guide, Downeast. Maine Coastal Program
National Fisherman	Sunrise County Economic Council Local Happenings
Saltscapes Food and Travel	Nancy Marshal Communications story pitches, including AFAR Magazine
USHarbor.com	Maine Office of Tourism tour operator spec sheet binder
MBPN	Two Nation Vacation spec sheet binder
WERU Community Radio	Fishing Community Resilience, the Role of Heritage Tourism. In “In Their Own Words, Fishermen’s Perspectives of Community Resilience,” by T.R.Johnson, A. Henry, and C. Thompson. Maine Sea Grant Research-in-Focus Report, May 2014.
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Newsday	
Maine Environmental News	

Credits

Written by Natalie Springuel

Edited by Catherine Schmitt

Designed by Kathlyn Tenga-González

Downeast Fisheries Trail logo illustration by Isaac Wright

With support from Downeast Fisheries Trail coordinating committee members:

Cathy Billings, Lobster Institute

Ben Fuller, Penobscot Marine Museum

Crystal Hitchings, Downeast and Acadia Regional Tourism & Washington County Council of Governments

Jennifer Peters, Sunrise County Economic Council

Catherine Schmitt, Maine Sea Grant

