A photograph of an elderly fisherman and a young child on a boat deck. The fisherman is wearing a blue cap, glasses, a red long-sleeved shirt, and yellow waders. He has his hand on the child's shoulder. The child is wearing a green hooded sweater and red pants, holding a large fish. The background shows a body of water and a blurred shoreline.

ISLAND JOURNAL

*The Annual Publication of the Island Institute
Volume Ten*



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Peter Ralston

“All land is one land under the sea...”

MARGARET WISE BROWN’S marvelous phrase from *The Little Island* (Doubleday, 1946) shapes both the theme and the process of this tenth anniversary *Island Journal*.

In 1983 a small group of writers and photographers came together to produce the first *Island Journal* as a paper-and-ink vision of a thousand treasures in our own back yard, the Maine coast. We came together understanding that the Maine islands, inhabited and uninhabited, comprise an archipelago of national significance, where the beauty and solitude that are increasingly disappearing from our planet are still preserved, and where human communities and lifeways have survived to sustain rather than further diminish these valued resources. The *Journal* was to be simultaneously a celebration of and a rallying point for these places and their values, before they, too, are swept away.

In ten years others have begun to share this vision. Today a large and diverse constituency—*island owners, year-round islanders, recreational users, fishermen, scientists*—has a variety of means to speak out and come together on the common themes of preserving and celebrating our island heritage. *Island communities, working together on issues of common interest, have proved*

to be increasingly effective voices in the offices of government, making the case that islands are different from the mainland and that islands are important models for the rest of Island Earth to consider. The landslide election of North Haven businesswoman and Island Institute trustee Chellie Pingree to the Maine Legislature and the birth of the new Town of Long Island in November 1992 are powerful symbols of an island ethic come of age. And for the uninhabited islands, the Maine Island Trail Association, launched by the Island Institute in 1987 and now on its way to becoming an independent organization, has become a new model of access based on responsible stewardship by users.

It is increasingly easy to see how “all land is one land under the sea”—how the problems that define and affect the ultimate health of the Maine island archipelago have their origins at a scale much larger than our own backyard. It is a truism that our island heritage has been shaped by the incredible abundance of the sea around us. But what happens if that sea should fail to thrive? All the poetry and photography in the world cannot prop up viable cultures if their economic bases collapse. The inexorable spread of

urban recreation will be met only by communities that are healthy economically and socially, and fiercely proud of their heritage.

Our efforts in this anniversary *Journal* reflect a starting point for the second decade: in the effort to see the larger picture, the one land under the sea, and to understand and learn not just from our own experience, but from our neighbors in other island cultures, who have either preceded us or will follow closely down the same difficult paths.

Honoring this new emphasis, we focus in this issue on the Gulf of Maine, including for the first time a number of voices and viewpoints from the Canadian side of the Gulf. Looking beyond political boundaries which separate us, we consider the geographical and cultural commonalities that link us—most specifically, this prodigious, fertile, yet embattled body of water in which all our cultures, hopes, and identities float.

As we look ahead and outward, we also look deeper within, to see what lessons can be learned from a reflection on our own more recent cultural history. We anticipate a significant event on the near horizon: the 35th anniversary of the Maine State Ferry System, that stepping stone that linked the islands to the mainland and opened a Pandora's box of accessibility. In marking this anniversary, we hope to catch not only a memoir of an era, the 1950s and early 60s, but also to penetrate the murk of questions, hopes, and hunches that supported the difficult community decisions that had to be faced as the new transportation system came into being.

In this issue of *Island Journal* we reflect a new and larger definition of islandness, based no longer on what separates us one from another, but what draws us together in our commitment to a way of life. Even as we celebrate our separateness as islanders, we must be excruciatingly aware of the underlying commonalities. In such a way, islands by their very underlyingness are not just outposts of the past, but the leaven of the future.

The number of people to whom we owe a debt of deep gratitude as we go to press with the tenth *Island Journal*, is longer than the number of pages in the entire issue. Among the many friends and supporters of the Institute a number have been unfailingly interested in ensuring that *Island Journal* would become an important forum for and celebration of Maine island art, poetry, history, science, and ideas. Special thanks are due Mr. and Mrs. Andrew Wyeth, Sally Engelhard Pingree, Champion International, Mahan Graphics, PenMor Lithographers, and the hundreds of writers, photographers, artists, and islanders who have opened their lives and doors to us. And we salute in this anniversary issue our members, donors, subscribers, and trustees who have never wavered in their enthusiasm for *Island Journal* and the work of the Institute.

IN MEMORIAM
George Putz
FOUNDING EDITOR
OF ISLAND JOURNAL
1942-1992

We make dreamships happen, but the purpose of them—fun, beauty, excitement, joy—needs its master-craftsmen, too. If it were not for Dance-Master, our entire enterprise would be fatuous bellringing and, at best, you would get a boat you would not love, and without purpose or meaning... And besides, the man is fun to know. We each have our own sense of humor, naturally, but we are all so different that, were it not for Dance-Master, our little jokes and wit would be lonely.

—from *The Valley*, an unfinished novel
by George Putz

George Putz aboard the CAPT. BEN PINE,
September 1990

Peter Ralston



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Peter Rabston (5)

FROM THE LOGBOOKS

Ten years along the archipelago

PHILIP W. CONKLING

AFTER TWO DAYS of a February gale and blinding snowstorm, a thick saltwater ice pack has been driven deep into the cove where RAVEN is moored in Rockland Harbor. We had planned to leave on an easterly voyage several days earlier, but when we arrived at the harbor, hints of the unforecast storm were evident in the stinging snow and the bite of the air on the cheek. We watched as the storm built gust by gust for several hours, and when it began to take the tops off the seas rolling into Rockland Harbor, we knew we weren't going "nowhere." By early afternoon the Breakwater Light disappeared in the white-out, and we could just catch the faint low moaning of the Owls Head foghorn like a lost voice in the wind.

Every winter is different. This past winter began like many, gray and raw in November. December was cold, but hardly a single flake of snow fell for six weeks between the first of December and mid January. Meanwhile the lakes, ponds, and quarries on the

islands and mainland froze into black ice mirrors where there was skating unlike anything we've seen for more than a decade.

Following the February gale, the coast was gripped by a siege of record-breaking cold, but today the tides have broken up the ice pack around RAVEN, and we intend to get underway again. Saltwater ice defies the common-sense notions of physics and chemistry most of us have struggled to comprehend since childhood. The snow-coated sheets of ice which have been loosened by the tides float slowly around in the harbor to form little "polanyis," or open runs, which in the high Arctic winter are where tiny, intense bursts of biological activity occur. Huge, hungry, black-backed gulls hunker down in the wind and wait. The very whiteness of these ice floes sets off an eerie green light from the surging sea which on other days looks dark and gray and frightening.

In the intense morning cold, we row the skiff out to RAVEN through a new layer of pancake ice—ice just thick enough to freeze the sea surface. This ice is

strange and elastic; it heaves on the surge of the tide; not quite solid, not quite liquid. The peculiar wonders of the natural world never cease, but this does not feel earthly; it is as if we were rowing through a frozen sea on the moon of Neptune.

RAVEN chokes to life. After a spirit-numbing wrestle to prime the engine's seawater cooling system, we cast off with a freshening northwesterly cold front bearing across our beam. Sea temperatures have been above normal so far this winter due to the dearth of snow, which is good if you're raising fish in ocean pens or diving for urchins or scallops. But today it makes for dense sea smoke because the air is so much colder than the water. Smoky formless vapors dance down the Bay, and you know these pale beautiful ghosts, if they could, would wrap you in their arms forever.

We are due tomorrow at Frenchboro and Swan's Island for meetings with townspeople about the fate of the salmon and trout farms that have brought desperately needed jobs and dollars to these two island towns, but which are in danger of being liquidated after last year's bank foreclosure and record low temperatures which have killed a large number of fish. On board with us is Jim Schwellenbach, our Island Schools Coordinator, who is a peripatetic, one-man teacher's resource center for the 14 offshore island schools. Among other projects, Jim is planning a conference which annually brings island teachers together for late winter problem solving and curriculum discussions among peers who are scattered along the archipelago.

Because we are not due downeast until tomorrow morning, we decide to pick up a mooring in Stonington for the night and hope the wind will let go a little before we have to cross the boneyard of Jericho Bay. Besides, it's dark early, and with the wind biting like "a driven nail," it seems wise to wind down and keep Sam McGee at arm's length. In the pale glow of the cabin light and from the frail heat of the stove, a slightly dreamy air pervades in the pilothouse, and we open the logbooks of RAVEN and FISH HAWK and fall into reminiscences of the Institute's ten years along the archipelago.

In 1985, not so many years ago, the first small FISH HAWK, a 23-foot Seaway runabout, was launched. From her we conducted our initial ecological surveys to determine the potential for publicly owned islands to support low-impact use. We called these islands "Maine's best kept secret" and hoped with this survey to ensure that long-term access to some of Maine's uninhabited islands would be preserved amid the rising tide of development, privatization, and commercial exploitation. As we wrote in 1985 and published the following year in the first *Log of the Fish Hawk*:

As recreation pressure continues to build on the Maine islands, state and local officials are going to have to answer the question, "Where can people go?"

—1985

For the next four months, various Island Institute staff and research associates would spend two to three days a week in good weather (and poor) visiting 125 of the most promising state-owned islands selected from carefully researched Bureau of Public Lands files.

The Maine coast and islands have the highest concentration of private ownership in America. Approximately 95 percent of the island acreage is privately owned. As recreation pressure continues to build on the Maine islands, as it has in recent years, state and local officials are going to have to answer the question, "Where can people go?"

Right now, in the absence of information as to which islands the public may use, people go anywhere and everywhere, and inevitably private property rights of island owners and residents are increasingly compromised. Some island owners (including some who are members of the Island Institute) believe that the less said about the issue of public access to Maine islands, the better...

Rather than pretend the issue will go away, we believe the challenge is to help identify islands where use is acceptable, and ecologically sound, and where it can be monitored and managed effectively.

In 1986, with the new 26-foot FISH HAWK donated by Seaway Boats and engines donated by Yamaha, the *Log* recounted Frenchboro's determined effort to reverse a generation of dwindling population levels with an imaginative homesteading project to attract new settlers to the remote and rugged community:

The next morning, the third solid day of fog, we headed for Frenchboro for the Annual Lobster Festival and meeting of the Frenchboro Future Development Corporation. The waterfront was full of all manner of boats when we arrived, and the Annual Lobster Festival was in full gear. Over buttered rolls, potatoes, and lobster, we discussed the homesteading project with David Lunt, the island's head selectman, master of ceremonies, and chief logistician.

Beginning then and for the next seven years we have reported on Frenchboro's inspiring and daunting effort to stabilize its future by bringing in new families and diversifying the island's fragile economic base. During this time the story has shifted from the initial thrill of national TV attention which deluged the island in more than 500 inquiries from idealists all over the country, to the hard realities of wrestling a precarious living from the cold seas surrounding this proud and lonely offshore community. Many were called but few were chosen—and even fewer have managed to stay.

In 1987, the *Log of the Fish Hawk* described a trip to Casco Bay where the heat of the 1980s development boom had leapt off the Portland waterfront and threatened to engulf Great Diamond Island four miles offshore:

After a potluck supper at the Great Diamond Island Association's grand old building, we headed up the hill to the porch of a cottage where a score of islanders had gathered. They

were there to discuss the merits of appealing the 40,000 gallon-per-day overboard discharge permit granted to developers on the other end of the island by the Maine Department of Environmental Protection.

For the past three years, since the Great Diamond Island development was first unveiled, these tenacious islanders have firmly maintained that a proposed 238-unit condominium and luxury home development on the north end of Great Diamond Island is too big to be environmentally reasonable. The development will mean a large privately operated sewage treatment plant emptying into inner Casco Bay's badly polluted waters, the destruction of a stand of 125-year-old pine and hemlock, and the addition of hundreds of more cars to downtown Portland's daily parking gridlock. As the moon rose over the earnest discussion on the porch, it was clear these sincere and frustrated islanders will do what it takes to press the issues at the federal level.

Casco Bay islanders and coastal citizens rallied around Great Diamond Islanders' view that this scale of development could be neither ecologically nor financially sound in the island context. Their voices for the first time introduced this important thought in the public mind: *Islands are different from the mainland.* With lawyers hired by the Institute and with the help of the Conservation Law Foundation, we slowly forged a compromise settlement with the developer for a smaller project that protected the island's unique history and scenic grandeur and moved the sewage outfall pipe off a 60-acre clam flat and into deeper water. Then, as islanders had predicted, this unsustainable development balloon burst and the project fell into bankruptcy. It was the sort of senseless project for which banks and ultimately taxpayers have paid an enormous, chilling price.

In 1987, FISH HAWK also tied up at the new Fish Auction on the Portland waterfront which when it opened earlier that year had provided fishermen for the first time with an open market. Here at this large display auction, loads of fish—some elegant and carefully iced, others mangled from the cod end, were viewed before the bidding began. At this auction a fisherman could be rewarded with a premium price for quality fish. We wrote:

Maine's fisheries will increasingly be competing in premium global markets and not just in the mass markets of frozen fish where the product is too often treated like pet food. But unless we protect our working waterfronts in hundreds of harbors and coves along the coast and islands, and maintain the water quality that nurtures all marine life, we won't have much to sell in Tokyo or anywhere else.

The following year we headed back west for a "Casco Bay Celebration," not only to bring islanders together for some fun, but to provide a forum for a more serious

discussion of how islanders might organize a chorus of voices to address the deteriorating water quality problems of the Bay which the Institute in partnership with the Conservation Law Foundation had laid out in the publication *Troubled Waters*.

We planned a Friday night rendezvous with 150 Casco Bay islanders aboard one of Casco Bay Lines boats to celebrate the diversity of the islands and hopefully to stimulate an informal exchange on conversation between "up-Bay" Peaks Islanders and their more isolated and fewer "down-Bay" neighbors. We had been planning this floating island party for close to three months with the friendly help of Pat Christian, the general manager of Casco Bay Lines, and had things right down to a minute-by minute schedule of arrivals and departures for the chartered trip from Portland to Peaks to the Diamonds, Long, Chebeague, and Cliff with island hosts at each stop.

Many up-Bay residents from Peaks and the Diamonds had never ridden the boat all the way down to Chebeague and Cliff—their stops coming before these outer posts—so there was a lot of information to exchange. The trip ended on the sobering note that it is the sea that connects these eight island communities one to another, and the alarming and deteriorating quality of bay waters will, if not addressed, ultimately detract from the quality of life of all Casco Bay islanders.

One of the other highlights of the 1988 Log was a late season, tempestuous voyage all the way to the other end of the archipelago into Cobscook Bay where we were joined by staff members of Maine Coast Heritage Trust:

In early October, provisioned for autumn weather and with a fresh crew aboard, the little boat headed east to Lubec where two others planned to join the boat for a week-long ecological survey of the Maine coast's least known corner—the intricate network of Cobscook's bays and the outer shores of the bold Quoddy coast between Cutler and Lubec. Working east to west, we started the survey on the inner tidal reaches of Cobscook's long finger bays and worked our way back "up" the coast to Cutler in an effort to integrate and quantify the ecological, cultural, and scenic features of this last vast under-developed shoreline of Maine.

Cobscook Bay's outer edges are fringed by the scaly shores of Eastport and Lubec, two towns whose fortunes, over the past century, have risen and fallen along with the inshore herring catch and now are being reborn as centers of salmon aquaculture production.

The full autumn days sped by too fast for us along this remarkable, almost unknown coast. The last day before heading back out into the Fundy Channel, while cataloging the wild eastern shore of Straight Bay, we saw the fluttering orange of surveyor's tape criss-crossing Coffin Neck. This discovery left us feeling if we could have but one wish for this coast, it would be that some beneficent philosopher-king would





declare this place a biosphere sanctuary where wildness would not be tamed and where our civilized souls could be turned out for momentary glimpses into the divinity of an enclosed, tiny, infinite wilderness where we can recognize God's face.

As if wishes had wings, we can report that the prodigious staff of The Nature Conservancy has been quietly working in Cobscook Bay these many past years to protect these priceless wonders.

In the 1989 *Log of the Fish Hawk* we returned to the theme of our search for a balance between access and protection of Maine's uninhabited islands:

In early June we headed east into a rising sun bound for Russ Island, one of 50 islands scattered like rolling stones off Stonington's working waterfront, to debate whether the Island Institute ought to acquire title to this particular center of the universe. In little knots of discussion between residents, trustees, neighbors, and fishermen, we stared intently into the foggy future. The conversation is desultory throughout these miniworlds, we sense in part due to the weather and in part to the delicate balance of interests we seek to serve through our acquisition of Russ Island. Will our access strategy serve to decrease the private insularity we, too, cherish; or to channel, as we believe, a growing number of sojourners to appropriate places?

At the end of the 1989 summer we took time to observe Monhegan's sesquicentennial which began with a wonderful parade and ended with a blessing of

the fleet of lobster boats and other craft, including the 26-foot FISH HAWK which looked somewhat frail 12 miles out to sea in Monhegan's rolling harbor:

The parade among the rocky outcrops of downtown Monhegan is pure antic theater. All seven vehicles on the island have been pressed into service as floats, which lurch through a throng of humanity. At the start, it's hard to tell who is parade and who is audience, but soon there is no distinction; it's all parade. The motley crowd of island residents, tourists, daytrippers, and personalities is briefly thrown into pandemonium somewhere between the Fish Beach and the Spa when salvos of water balloons are fired from the astonishing sea goddess float at the judges posted to make awards. After a cease-fire has been hastily arranged, hundreds gather in the heat of the day to honor the island elders and the

twin spirits of dogged individualism and vigilant mutualism that have artfully infused Monhegan's polity since anyone can remember.

Islanders' voices for the first time introduced this important thought in the public mind: Islands are different from the mainland.

—1987

In 1990 FISH HAWK is overboard in early April and shortly heads out to Butter Island in northern Penobscot Bay:

Tom Cabot's Butter Island has inadvertently become a kind of test case for whether the stewardship of a privately owned wild island can be shared by a responsible island public. Mr. Cabot's children, now Butter's legal owners, face a vastly different situation from when their father first bought the island nearly a half century earlier and allowed almost anyone unfet-

tered access to this remarkable kingdom. In recent years, the number of boats and people who wander Butter's shores, beaches, headlands, and interior has increased exponentially.

A crew of volunteers recruited from Island Institute staff and Maine Island Trail Association members, supported by Outward Bound's motor vessel HURRICANE, begin two days clearing and burning piles of spruce from the five-acre headland clearing where Tom Cabot says he intends to have his ashes spread. When we quit the island after two days of progress and a temperature swing of 50 degrees, we sensed that the 250-acre spruce-covered island has enough volume for a generation of such clearing projects. The question is whether there is enough space on Butter's finite shores to accommodate the two-legged creatures which congregate there in growing numbers in the summer.

By the middle of May another drama begins unfolding at the outer edge of Penobscot Bay as the account in the Log picks up:

We have been informed that the Coast Guard intends to demolish the fire-damaged lighthouse keeper's building on Heron Neck near the entrance of Vinalhaven's Carver's Harbor. With the Lighthouse Preservation Society (of Massachusetts), we intervene in the Coast Guard's decision and contact George Mitchell's office where a stay of execution is granted while we try to find a private individual willing to undertake repairs in exchange for a long-term lease.

Telescoping three years ahead into the present, we can report that a long and difficult negotiation with the Coast Guard has created huge piles of paper, but failed to persuade them to issue the lease due to incredibly complicated licensing requirements. Although we are sympathetic with the Coast Guard's need to abide by all legal requirements, the fact of the matter is that the hugely symbolic lighthouse structures of Heron Neck, a part of the National Register of Historic Places, have remained open to the cruel work

Butter Island has inadvertently become a test case for whether the stewardship of a privately owned wild island can be shared by a responsible island public.
—1990

of the wind and weather while we sit by in frustration. As we go to press, it will take a literal Act of Congress to save Heron Neck, and it is surely worth one last try.

Later in the summer of 1990 we head to the west'ard and:

...on the way across Casco Bay, we come up through Broad Sound and are hailed by one of Chebeague's fisherman-philosophers who fills us in on the latest news of Stockman Island. This low, brushy 30-acre island had been important seabird habitat in Casco Bay for decades, until recent years when raccoons mysteriously appeared there and cleaned out the gull and eider nests. To make matters worse, Stockman's designation as a Resource Protection Area was inadvertently left off Cumberland's recent zoning map, so there is no legal way to prevent the construction of the residence that is now proposed for the island. Gunwale to gunwale in the mid-morning swells, we ponder a strategy to keep Stockman what is ought to be: a seabird nesting habitat in an increasingly busy and built-up Casco Bay.

Through the combined efforts of Maine Coast Heritage Trust, the Island Institute, and the Cumberland Mainland and Islands Trust, a deal is struck with the owner to buy out his interest and protect this wildlife sanctuary.

FISH HAWK's 1991 season began on a somber note:

Spring comes more reticently to Rockland Harbor now that virtually all of the fish factories along the waterfront have closed their doors for good, victims of the collapse of commercially viable schools of cod and haddock due to overfishing. The harbor is strangely quiet and empty when FISH HAWK goes overboard in the freezing rain of an early April tide.

By midsummer the mood cannot help but improve, and we confront another important decision:

The owners of Campbell have asked whether the Island Institute is interested in receiving the island as a donation. As often happens in the conservation world, the future has a way of knocking on your door and asking you questions before you're prepared to answer. Campbell Island's shores are thickly wooded and intersected by little pockets of sandy beach, salt marsh, shelving slabs of granite, and extensive clam and mussel flats. The interior spruce are tall and mature although some have begun toppling over. Fern glades and birch groves give a light and airy feeling to the interior, unlike the black growth of Stonington's Merchant Row islands. Permanent protection of this island is too important to let slip away while we try to determine what our acquisition policy might be. The future is here.

Indeed, the future kept knocking on our door throughout the remainder of



1991 and into 1992, when an additional three endowed islands were donated to the Institute including Black and Hungry Islands in Muscongus Bay, the generous gift of Mr. and Mrs. James Cooney of Waldoboro. The five islands now owned by the Institute are the natural living crucibles where the delicate enterprise of balancing conservation and natural resource strategies; of finding the balances between local use and kayakers of the Maine Island Trail; of protecting ospreys and productive clam flats, will be put to practical tests day after day further into the future than we have vision to see. These gifts serve to confirm our growing conviction that large numbers of island owners share a true "island ethic," grounded in the belief that we are all temporary stewards of one of the powerful and spiritually refreshing landscapes on the face of the globe.

Toward the end of the 1991 summer season the Institute is drawn into a new debate which has emerged along the delicately balanced shoreline of Bass Harbor's working waterfront. There 40-50 fishing boats that use the C.H. Rich Company wharf and depend on Little Island Marine dodge carefully around the harbor amid an equal number of resident yachts serviced by Bass Harbor Marine and Chummy Rich's marina at the head of the harbor. But into this balance a huge wild card has been dropped, as we recounted in the Log:

The long shadows cast by Cadillac's barren cliffs pale in contrast to the looming proposal to construct an 84-slip marina and "boatel" in the island's last working waterfront at Bass Harbor. As fishing boats have been progressively displaced from Mount Desert's changing waterfronts at Bar Harbor, Seal Harbor, and Northeast Harbor, the viability of Bass Harbor's fleet of working vessels and the commercial enterprises that support its fishermen are threatened. The delicate balance which is precariously maintained between Bass Harbor's recreational and fishing vessels would be decisively tilted against fishing interests if such a proposal were approved.

The discussion over the future of Bass Harbor's waterfront is lively; town officials who are present have an understandable interest in encouraging new uses for the abandoned canning factory where the boatel and marina have been proposed. But the fishermen, backed by the Harbor Committee, have presented a compelling case demonstrating the serious conflicts which such a proposal presents. Although the air is not cleared at the end of the August meeting, by fall the Bureau [of Public Lands] has ruled for the fishermen in a precedent-setting case,



and by December the developer has withdrawn his court appeal and Bass Harbor's working waterfront is, for the moment, secure.

The delicate balance between Bass Harbor's recreational and fishing vessels would be decisively tilted against fishing interests if the marina proposal were approved.

—1991

Another controversy, this time in our backyard in Penobscot Bay, again tests the Institute's resolve to "place ourselves at the difficult and painful boundaries between competing needs and search for solutions that balance local and national needs." Recounting these words from our Mission Statement, which we do every so often, reminds us that our chosen role along the coast is not easy, which is painfully obvious as:

...we round out into Two Bush Channel in a quartering sea and head for the north end of Metinic Island which has been recently subdivided into 11 lots. We are working with members of the lobstering family who own this magnificent property to find a balance between the island's historic use as a fishing station and its century-long history as Penobscot Bay's largest seabird colony.

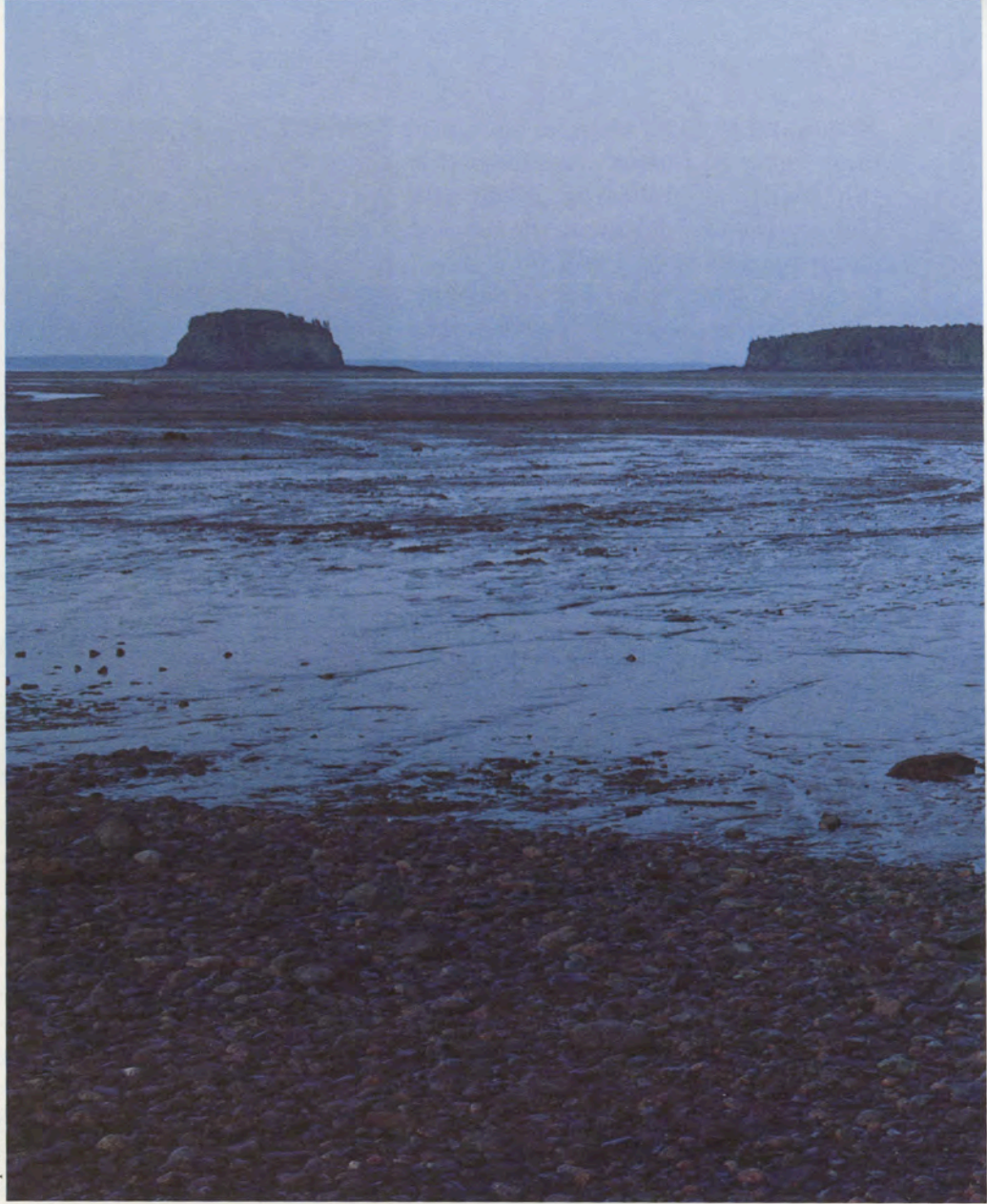
It's still blowing hard, but we get the anchor down and go ashore to survey the northern 86 acres. Immediately we put up a dread flight of Arctic terns that are defending nesting territory on a nearby beach. As we make our way around the shores, rafts of eiders and black guillemots are flushed from their nests and gather offshore while gulls scream and careen overhead. The uncertainty that has clouded the efforts of the lobstering family to reclaim their ancestral property is mirrored by the uncertainty over the fate of half a thousand pairs of nesting seabirds if Metinic is fully developed. Already a year into this project, the delicate balance between private property rights and prime wildlife habitat—between people and seabirds—is easier to describe in the abstract than to sort out on the ground.

(continued on page 87)



THE GULF OF MAINE

*A special section
focusing on the
natural and human
resources of the
Gulf of Maine*



Stephen Homer

Five Islands, Nova Scotia

IN 1991 A CARTOGRAPHER at the Maine State Planning Office drew a new map of the Gulf of Maine from Cape Cod to the upper reaches of the Bay of Fundy. The map's features — the varied coast with its many rivers, deep indentations, and underwater banks offshore — were like those of other maps with one exception: this map included no political boundaries. The places we call Massachusetts, New Hampshire, Maine, New Brunswick, and Nova Scotia were represented as they had been before they became part of two nations and five jurisdictions. Like a snapshot of earth from space or a sudden insight — “Why didn't I think of that before?” — the map showed the Gulf of Maine as it truly is.

The borderless map was commissioned, appropriately enough, by the governors and premiers of the states and provinces that surround the Gulf of Maine, who three years ago formed a forward-looking partnership called the Gulf of Maine Council on the Marine Environment. In a sense, the Council's purpose is to transcend the political boundaries that divide the various jurisdictions in the region.

“A sea within a sea,” some call the Gulf of Maine; a geological feature born of colliding continents, volcanoes, glaciers, and the rise and fall of sea level. Tides, water temperature, inflowing rivers and the shape of dry land and ocean bottom have made the Gulf of Maine ecologically unique.

It is a young place, by geologists' standards, formed about 16,000 years ago and still changing today. For half that time, perhaps, the Gulf of Maine's rich natural resources have made it hospitable to people — first



the native Americans, then the Europeans, all drawn here by the fisheries and forests that are still the basis of the region's economy.

Today, after harvesting this immense commons for centuries, we find that the Gulf of Maine's resources are at risk. Its forests are depleted, some of its rivers and bays are polluted. Its fisheries, like marine fisheries in many parts of the world, are in serious difficulty because we haven't managed them on a sustainable basis.

Because we at the Island Institute share these concerns, we devote an entire section of this year's *Island Journal* to the Gulf of Maine. We explore its history, both natural and human. We compare the different political cultures on either side of the international border and how they have affected the way New England and the Maritime provinces manage their resources. We consider the condition of the Gulf's great fisheries and propose a new way of looking at them. And finally, with the help of adventurer and educator Dick Wheeler, we take a paddler's-eye view of the Gulf and what is happening to it.

The picture is not always a pretty one, but like the Council's borderless map that shows us the Gulf of Maine's true nature, it is a picture we must begin to understand.



Gulf of Maine watershed with major river basins, based on a map produced by the Gulf of Maine Council on the Marine Environment, Maine State Planning Office.



Old Rocks, Young Gulf

*Geologically,
this corner of the globe
is still taking shape*

JOSEPH T. KELLEY

THE SHORELINE OF the western Gulf of Maine exhibits an extraordinary variety of geological features. Formed during a collision between continents hundreds of millions of years ago, the bedrock controls the shape of the coastline and remains surprisingly dynamic today. The Gulf of Maine itself, with its many basins and ledges, is an ecologically unique "sea within a sea" along the coast of the United States and the Canadian Maritime provinces.

The rocks of the Gulf of Maine hold clues to the processes by which continents and ocean basins form and grow, and the mantle of Ice Age deposits resting on those rocks contains information regarding changes in our global climate.

The semi-enclosed Gulf of Maine serves as a grand laboratory in which to examine modern oceanographic processes. The regional winds, waves, and currents have reworked the deposits remaining from the Ice Age into our contemporary coastal environments. These processes—and their

silent partner, sea-level rise—require better understanding and appreciation by a society which increasingly seeks to live and play along the shoreline of the Gulf of Maine.

THE BEDROCK FRAMEWORK

All of the rocks bordering the Gulf of Maine are part of the Appalachian Mountain chain, which extends from Georgia to Newfoundland. The oldest rocks took form as shallow-water reefs or deep-water sand and mud layers surrounding volcanic island chains and on the margins of the youthful North American and Euro-African continents. The presence of the volcanic rocks indicates movement of the earth's crust, although most of the layers of sediment accumulated quietly for hundreds of millions of years with only episodic disturbances.

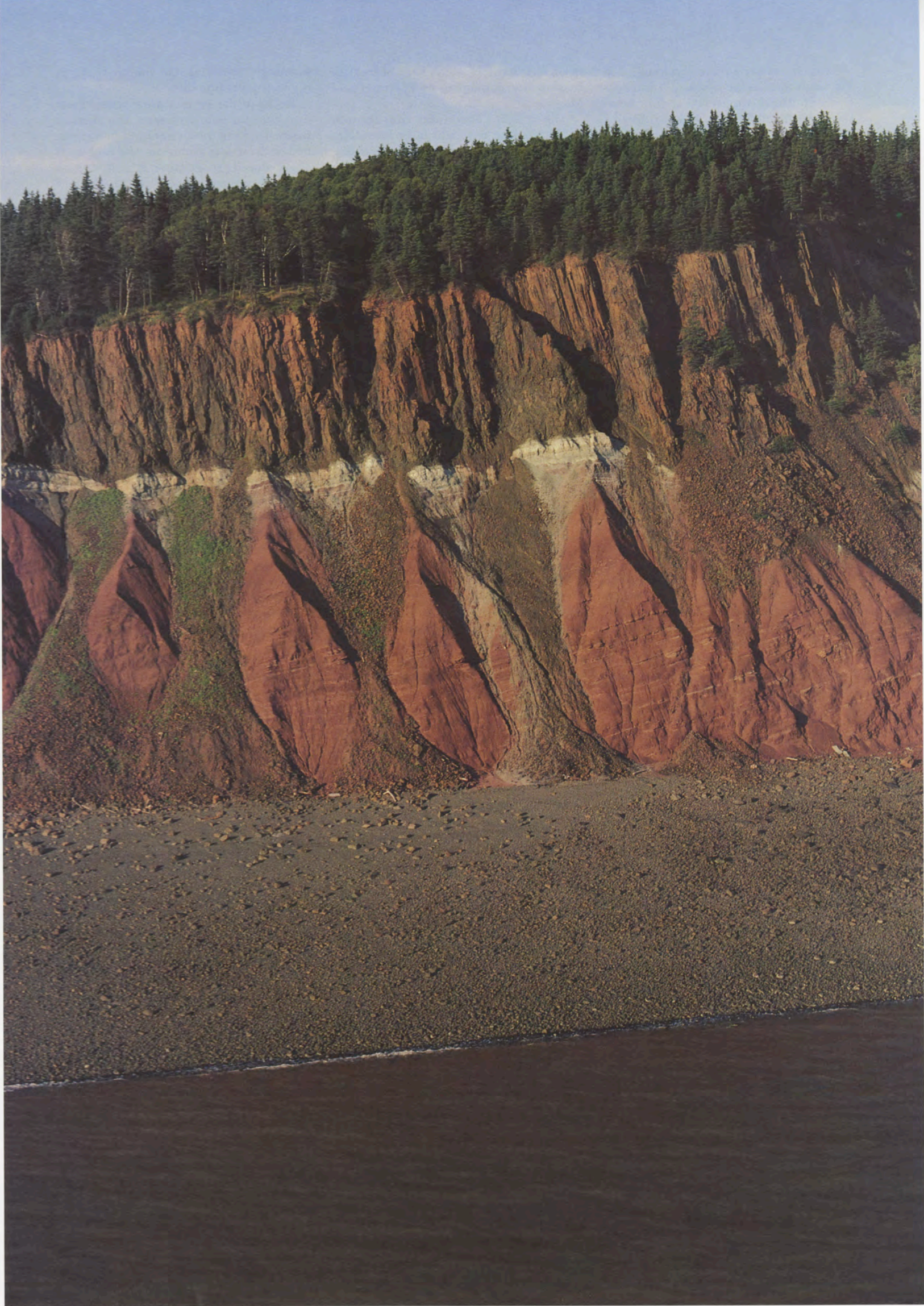
Sometime around 430 million years ago (geologically in the late Ordovician Period), crustal movement analogous to that occurring near Japan or Indonesia today brought a volcanic island chain into contact with the edge of North America. The collision raised a mountain chain throughout central New England, and the heat associated with the collision formed molten masses of rock which later cooled to form granitic rocks.

As this mountainous mass eroded, it shed sand and mud into the adjacent sea until renewed crustal movement brought the European-African continents into another collision with North America around 380 million years ago (geologically, the Devonian Period). The layers of sand and mud were heated into rocks and folded and broken by faults accompanied by earthquakes. A mountain range comparable to the Himalayas formed. Movement of deep-seated molten rock led to renewed granitic and volcanic rock formation.

Erosion has greatly reduced the height of the Appalachian Mountains since their formation. Indeed, the landscape of the Gulf of Maine is one defined by erosive processes acting on rocks that resist erosion differently. Even over small distances, differences in the rate of erosion of various rock types have led to differing heights of the rocks. Granites have generally resisted erosion most strongly and tend to form high points and headlands, while the altered sand and mud layers (the metamorphic rocks) are more readily eroded and occupy lowlands and the bottoms of bays.

Cliffline erosion along the Minas Basin, where a soft sandstone meets Fundy's exceptional tides

Stephen Homer



Erosion has been more pronounced in the south than in the north. We find relatively youthful, unaltered sedimentary rocks at the surface in New Brunswick today, and rocks altered by extreme heat and burial (the roots of the ancient mountain chain) dominating the landscape to the south.

Rocks comprise the framework for the landscapes of our region and determine its largest-scale appearances. Based on the orientation of the rocks and their relative resistance to erosion, we can classify the shoreline of the Gulf of Maine into eight compartments, or regions. The regions are internally similar, but they differ from their neighbors.

Some of the youngest and most distinctive rocks of the Gulf line the eastern shore and islands of the Bay of Fundy. Here, in the **Rift Volcanics** compartment, erosion-resistant, black basaltic volcanic rocks form the highest cliffs in the Gulf of Maine. These lava flows welled up from deep within the earth's mantle, and the basaltic rocks in the region are identical to rocks presently creating new ocean crust in the mid-Atlantic Ocean (Iceland). From the ground, individual layers of the flows are visible, as are columns formed during the cooling of the rocks. From space, the straight high cliffs of North Mountain and Digby and Grand Manan Islands are very distinctive features. A fold in the volcanic rocks leads to a bend in the orientation of the coast, and a prominent headland at Cape Blomidon.

At the head of the Bay of Fundy undeformed "**red beds**," or red sandstones, form weak cliffs that are actively eroding today. The eroded sand and mud grains impart the distinctive red hue to the turbid waters of the Bay of Fundy. The large basins of the Gulf of Maine possess red beds and black volcanic rocks identical to those in the Fundy region. The overall shape of the Gulf of Maine is one imparted by the rift basins which form its deeps.

The eastern shore of the Bay of Fundy and the easternmost portion of the United States are collectively known as the **Cliffed Coast**. The rocks here are a complex mosaic of very old metamorphic rocks (among the oldest bordering the Gulf of Maine) juxtaposed with occasional red beds, rift volcanics, and still-older volcanic island rocks, of which West Quoddy Head is an example. The indentations in the coast generally coincide with the occurrence of easily eroded red beds and other sedimentary rocks, while the more ancient metamorphic and volcanic rocks form straight coasts. The mix of rock types in this area (well seen in Fundy National Park) results in part from the numerous faults, or locations where earthquakes have ripped up the rocks and moved them. Earthquakes still occur in the Gulf of Maine region, and the Oak Bay Fault, which forms the border between Maine and New Brunswick, is associated with relatively frequent swarms

of quakes, some of which have historically been quite damaging to Eastport and Machias.

The straight Cliffed Coast ends abruptly at Machias Bay, from which the **Island-Bay Complex** extends south to Penobscot Bay. The rocks in this compartment vary from relatively easily eroded metamorphic rocks, which underlie the bays, to granitic rocks, which support the islands. The granites were bubbles of molten rock deep within the earth during the collision between Europe and North America, and the rounded shape of Mount Desert and most of the other islands of the region reflect that origin. Penobscot Bay is a

**The landscape of the
Gulf of Maine is one
defined by erosive processes
acting on rocks that
resist erosion differently.**

prominent feature of this compartment and is the largest embayment in the Gulf of Maine still associated with an important river (most of the rivers of the region were moved out of their valleys by Ice Age events). The straight body of water separating Deer Isle from the mainland, Eggemoggin Reach, represents another fault zone like Oak Bay, where earthquakes have broken up the rocks and led to their removal by erosive processes.

South of Penobscot Bay, the **Indented Shoreline** compartment is probably the most distinctive region of the Gulf of Maine. The northeast-southwest orientation of slightly more erosion-resistant beds of metamorphic rocks forms the straight peninsulas and chains of islands and shoals, while somewhat more erodable layers of rock floor the many narrow estuaries separating the peninsulas. The subdued nature of this coastline compared with those to the north is a result of the weaker nature of the rocks. Small bodies of granites occur at some of the headlands in the area, but most of the layered coastal rocks visibly demonstrate the deformation of their complex past.

The **Arcuate Embayments** compartment reaches from south of Casco Bay to Boston, and then continues from the south shore of Boston to Cape Cod. Again, relatively easily eroded metamorphic rocks underlie the embayments, while granites protect the many headlands. The youngest rocks in the Gulf of Maine are the granitic rocks which form the distinctive peninsula at Cape Neddick. The metamorphic rocks of the region are composed of relatively monotonous, former deep-water mudstones. Their coast-parallel orientation prevents them from

forming peninsulas like similar rocks in the Indented Shoreline.

Rocks of the Boston area define their own unique compartment, the **Boston Basin**. They are mostly easily eroded rocks, hence their low elevation and embayed coast. Fossils from Deer Island, site of Boston's sewage outfall to the Gulf of Maine, show greater affinities with ancient European animals than North American, and geologists believe that rocks from this area were left behind when the Atlantic Ocean opened and Europe separated from North America. Other rocks in the basin include volcanic materials and a spectacular conglomerate, or rock composed of large boulders.

Lacking bedrock of any sort, the southernmost coastal compartment within the Gulf of Maine, **Cape Cod**, is wholly comprised of Ice Age sand and gravel. Like the islands to its south—Block, Martha's Vineyard, Nantucket, and Long Island—Cape Cod's loose, unconsolidated soils are prone to extremely rapid erosion by the sea.

GLACIAL PERIOD

Tens of millions of years of rain and wind and rivers were required to wear down the rocks into nearly their present shape. Beginning about two million years ago, and continuing to only about 11 thousand years before the present time, however, glaciers influenced the landscape more than any previous event of similar duration.

We know from studies of the deep sea that ice ages began about two million years ago. Since each glacial advance removes most traces of prior Ice Ages, it is only in areas removed from glacial scouring, like the deep sea, and at the southern terminus of the glaciation, that we find deposits from earlier events. Cape Cod, Martha's Vineyard, Nantucket, Block, and Long islands represent the end point of the most recent Ice Age, as well as of at least one earlier advance.

The western portion, or "biceps," of Cape Cod is a large mound of boulders, gravel, sand, and mud pushed into place by the vast leading edge of the glacier which stretched all the way from Hudson Bay about 20,000 years ago. This "moraine" is as uneven in shape as in the size of the material which forms it, and its many small, boulder-littered hills and valleys impart a rough, unfinished character to the Cape.

Immediately south and east of the moraine the land is less hilly and pock-marked with lakes and ponds. Small rivers clogged with sand and meltwater from the adjacent ice formed this area, and the "kettle lakes," as they are known to geologists, represent locations where ice blocks became lodged and later melted out. As ice melted out in Cape Cod Bay, meltwater from ice to the east flowed into the bay (which was a lake), cutting distinctive channels across the outer Cape.

The "fist" of Cape Cod, with Provincetown and the vast dune fields, formed much later.

There are no moraines comparable to Cape Cod elsewhere in the Gulf of Maine, although somewhat smaller glacial features abound. Boston Harbor's islands are another sort of glacial deposit called a drumlin. On land, these teardrop-shaped deposits retain their original streamlined form (Bunker and Breed's Hills are examples), but where drowned by the sea, their shape has been altered by erosion.

Other small, but significant, glacial moraines formed as ice melted across the present coastline of Maine about 13,000 years ago. These formations contain layers of ocean mud in addition to the usual assortment of sand and gravel. Shells and seaweed in the mud have been used to establish the chronology of deglaciation. The position of the moraines across many of Maine's bays has exercised an important control on the evolution of the bays ever since.

A short distance inland in eastern Maine, extensive blueberry barrens exist on top of what were once sandy river deltas. The deltas mark the landward extent of the early post-glacial sea and extend from New Brunswick to Frenchman Bay, and up river valleys for more than 50 miles. All of the lowlands of Maine were covered by the sea at this time, about 12,000 years ago, and a deposit of marine mud mantles the bedrock and subdues the landscape as a result. An important consequence of the accumulation of marine mud at this time was the infilling of river valleys that existed before the last Ice Age. As a result, when the sea later withdrew, many rivers were unable to locate their former valleys and were forced over falls and rapids on their way to the sea.

This is especially evident near Casco Bay, which was carved by the Androscoggin and Kennebec Rivers. These streams are blocked from entering the sea at Brunswick, Maine, by glacial deposits and join in Merrymeeting Bay, before passing through rapids at The Chops on a new path to the sea. The Saco, St. John, and other smaller streams also display this derangement of river drainage by glacial deposits.

The deep basins of the Gulf of Maine and the Bay of Fundy were scoured to their present depth by the weight of a



Tide rips off Cape Split, Minas Basin, Nova Scotia

Stephen Homer

mile of glacial ice. The many north-south trending valleys on Mount Desert Island, including Somes Sound, the only fjord on the United States' east coast, were selectively etched by the ice which moved in the same direction. Although these are the only large-scale glacial-erosional features in the Gulf of Maine visible in images from space, evidence for erosion by ice is everywhere visible on the ground as scratches and grooves in the rocks.

The final major effect of glaciation in the Gulf of Maine lingers with us today: the changing level of the sea. Formation of the great ice sheets withdrew so much water from the sea that the global ocean level dropped over 330 feet 20,000 years ago. Georges Bank and many of the shallow ledges in the Gulf were exposed. As the ice melted, water returned to the ocean and sea level rose. In Maine, the great weight of the ice so lowered the elevation of the land that despite the lower-than-present level of the sea, marine waters flooded the land. After the ice melted away, the land rebounded to its "normal" elevation, and the sea withdrew to about 200 feet (60 meters) depth about 10,500 years ago. Sea level has risen ever since.

The continuing rise in sea level is one of the major influences on the shape of the Gulf of Maine today. Part of the apparent rise of the sea results from sinking of the land, while the remainder is

probably caused by continued melting of glacial ice and warming, with resulting expansion of the world ocean. Although the rate of rise is measured at only millimeters per year, it adds up over time. In Boston, Portland, and Saint John, New Brunswick, gauges constructed earlier in this century to predict tidal heights have recorded over 0.3 meters (about 1 foot) of sea-level rise. Even at its present rate of increase, rising sea level presents many problems for coastal residents. If the predictions of a 1 meter (3 foot) rise in the next century by the Environmental Protection Agency come true, things will get worse.

MODERN PROCESSES

Although rising sea level is the most important single factor changing the overall shape of the Gulf of Maine today, its effects are often masked by the influence of winds, waves, and tides. These daily processes are the relentless agents of change that allow the shoreline to accommodate the rising level of the sea.

Our winds vary seasonally in the Gulf of Maine, and may even change considerably within seasons. Summer is the driest, calmest time of the year. Winds are generally from the southeast or southwest, but rarely very strong. An exception occurs during occasional hurricanes when strong but short-lived winds occur. Tropical storms are rarely important to the coastline of the Gulf of Maine, because the cold water of the Gulf is not conducive to their formation. When a hurricane arrives, it may weaken quickly. Tropical storms which do venture into the Gulf of Maine also move much faster than in their spawning grounds, crossing the coastline in a matter of an hour or so. Waves created by hurricane winds constantly change their direction as the storm track moves, and rarely build to great heights.

The north winds of the fall are strongest just after a cold front passes over the coast from Canada. Rain usually precedes the passage of the front, and since this meteorological event occurs relatively frequently, the autumn is an important season for rainfall. After the spring freshet, rivers entering the Gulf of Maine attain their greatest volume during the fall.

Winter is the most important weather season along the coast. Extratropical storms move up the St. Lawrence River



Columnar basalt, Penobscot Bay

Philip W. Coulting (4)

Island near Popham Beach, Maine, are unique to rocky coastal regions like the Gulf of Maine.

Because of refraction, waves often approach a beach at an angle. Sand is moved along the beach in the same direction as the wave. This alongshore movement of sand results in the formation of a sort of beach known as a spit, attached to land at one end, ending in the ocean. Within the Gulf of Maine, southern Massachusetts and Cape Cod possess the largest spits.

Where spits grow and new land is formed, some old land must disappear. The source of sand for the spits of the Gulf of Maine is typically an eroding glacial deposit. Because Cape Cod is com-

glacial deposits. Shortly after the last Ice Age ended, when sea level was lower, these streams cut deeply into those deposits on their way to the distant shoreline. There, in present water depths of 200 feet, they deposited extensive sandy deltas. As sea level has risen, waves have reworked these deltaic sands into today's magnificent beaches (Popham and Reid Beach State Parks, Herring Cove Beach, Old Orchard Beach, and Plum Island National Seashore, respectively). The many islands protecting the Penobscot River mouth prevent waves from forming beaches in Penobscot Bay. An important question facing geologists today is whether these highly dammed rivers still contribute sand to the coast.

Tides are the remaining modern process that builds up our coastline. Within the Gulf of Maine, tidal range increases from less than 6 feet in Cape Cod Bay to greater than 44 feet in the Bay of Fundy. The enclosed nature of the Gulf of Maine, separated from the open Atlantic by Georges and Brown's banks, coupled with the irregular shape of its coastline, permits the moon's gravitational attraction to create exceptional tides. That is why the proposed construction of a tidal dam across the Bay of Fundy, by changing the shape of the Gulf of Maine, would profoundly alter the tidal regime.

Tidal energy does not add much to beaches; its influence is spent on the mud flats and salt marshes. In parts of the coast sheltered from large waves by beaches, islands, or shoals, the periodic movement of the tides brings mud into coastal embayments just as waves often contribute sand to beaches. Very often muddy glacial deposits eroding along the coast are an important source of mud to clam flats and marshes.

ANNUAL EVENTS

The benign winds, waves, tides, and currents that operate most of the time are constructive processes which build up the Gulf of Maine's coastal environments. Mud is added to tidal flats and marshes from eroding bluffs of Ice Age sediment. Spits and other beaches are lengthened by waves and currents. In the late fall and winter, however, storm systems are more powerful than in the summer, and the coastal environments must adjust to new conditions.

The large, closely spaced waves of a northeast storm do not bring sand to add to the beaches. Rather, the large waves reach farther up onto the beach and often remove sand. Even the sand dunes may be assaulted by the waves of a winter storm at high tide. During the most powerful events of any given year, the smaller dunes are breached, and storm waves roll unimpeded across an entire beach. They may remove sand from the seaward side of a beach and deposit it on top of the salt marsh on the landward margin. When the storm is over, the beach may appear wider

valley and produce "sou'westers," or track across the Gulf of Maine and form "nor'easters." These storms may last for several days, and the persistent strong winds blowing from a single direction generate the largest waves that occur in the Gulf of Maine. Although the waves often wreak havoc on beaches, many protected bays in the northern portion of the Gulf of Maine are shielded from the wind and waves by a cover of nearshore ice from December to April.

Spring is a milder extension of the winter. Storms still occur, though they bring mostly rain even to the northern regions. Snowmelt, coupled with the persistent storms, results in the greatest river contributions to the Gulf of Maine. Plumes of muddy water are often seen in satellite images of the coast during this time of year.

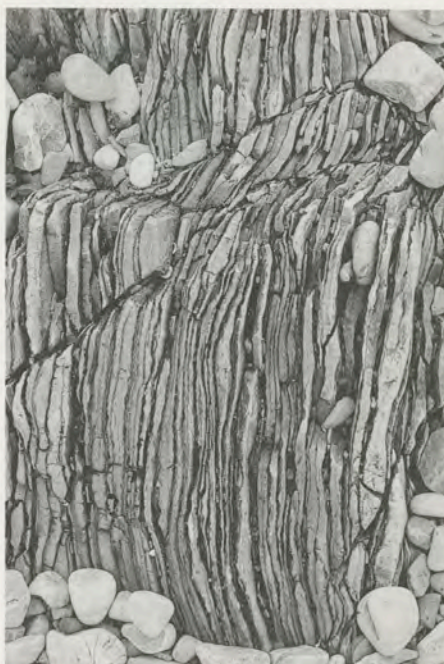
The benign late spring-summer-early fall conditions build up coastal environments. The gentle winds produce small waves which bring sand to beaches, and even blow that sand into dunes. The spectacular dunes in the Provincelands at Cape Cod National Seashore attest to the importance of the wind in areas with an abundance of sand. Even at smaller beaches, like Plum Island National Seashore, Massachusetts, or Reid Beach State Park, Maine, large dune fields dominate the littoral environments. Although the sand for our coastal dunes clearly comes from the beach, it is instructive to observe that the predominant wind is from the north-northwest, which is offshore for many regions. Thus, dune fields are often scalloped on their backside by seaward-oriented, parabolic dunes marking the return of some wind-blown sand to the sea.

The wind influences more than the shape of sand dunes; the major function of the wind is to produce **waves**. As waves approach shore, they encounter islands which alter their direction. This effect on the orientation of waves by islands and shoals is called refraction, and is most manifest as the encircling necklace of wave crests surrounding islands. If the islands are near a sandy coast, sand is moved around the islands, connecting them to the mainland with a beach called a tombolo. Tombolos like those at Fox

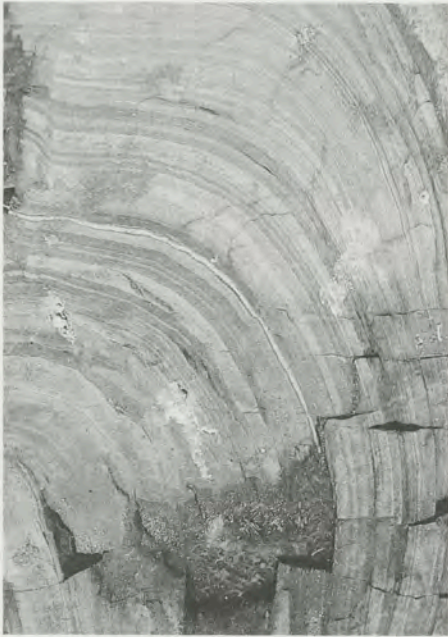
The proposed construction of a tidal dam across the Bay of Fundy, by changing the shape of the Gulf of Maine, would profoundly alter the tidal regime.

posed exclusively of such material, it has the finest examples of spits. To supply its growing beaches, the outer cliffs of Cape Cod are eroding at a rate of 1 meter (3 feet) per year.

Though wave erosion of glacial deposits formed most of the beaches in the Gulf of Maine, some large beach systems off river mouths have had a different origin. Large rivers like the Kennebec, Saint John, Saco and Merrimack flow through vast watersheds full of sandy



Upturned meta-sedimentary rocks, Casco Bay



Third order folds from continental collision, Penobscot Bay

and lower, and it will likely have moved somewhat landward. These occasional storm events similarly have an exceptional impact on eroding bluffs, causing them to retreat and yield most of their annual contribution of sand and mud to the littoral zone.

Storm events move our coastal environments landward, toward higher ground. Beaches are not destroyed by this movement, nor are marshes and flats. Instead they are reinforced and strengthened by their adjustment to the rigors of winter's storms. It is this adjustment which has permitted them to endure the final modern process, the long-term rise of sea level.

SEA-LEVEL RISE: THE CONNECTIONS

Even to the casual observer, it is obvious that the modern coastal environments are arrayed in a highly organized fashion in any embayment along the coast. The outer area, where waves are most powerful, is often rocky and long-since swept clean of glacial deposits. Only boulder beaches and bedrock can survive the pounding of such wave exposure. In open coastal locations even the seafloor is bare rock. If some protection exists from waves, as at Saco Bay, Maine, or if an abundance of glacial sand is present, as at Cape Cod, beaches may be present.

Salt marshes and flats flourish in the most landward and protected regions at the head of an embayment. Here waves are less important, and tides and rivers build up the muddy elements of the coast. Geologists refer to this region as the tide or river-dominated zone of an embayment, and it is the area of most extensive salt marshes and mud flats. Glacial deposits in this area are generally protected from erosion by the sheltering effect of the marshes and flats.

Between the wave and tide-dominated zones lies a mixed-energy zone. This is the region where glacial deposits are actively eroding and supplying new material to the coast. Marshes and flats, where they exist in this zone, are usually quite small and almost always eroding.

The linkage between these zones is the rising level of the sea. The wave zone has been exposed for the longest time to the rigors of the sea and all glacial deposits are gone. Beneath the beaches, and occasionally on their seaward sides, geologists have long observed deposits of salt marsh peat and tidal flat mud, indicating the landward shift of the coastline. Environments that once flourished at the head of a bay are now exposed beneath

A day of reckoning is coming for each location along the coast of the Gulf of Maine: Do we armor the shore or retreat landward?

the environments at the bay mouth. The rising level of the sea is moving all the coastal environments landward. In time the quiet environments of the tide-dominated zone will become more exposed by rising sea level, and waves will begin to erode the marshes and flats. As their protective influence disappears, the glacial deposits will themselves become exposed and erode and provide material for new tidal environments to the west. Eventually the rising sea will have swept the glacial deposits away, and only sand and boulder



Folded sedimentary unit, Muscongus Bay

beaches will survive. Ultimately, all the coastal environments will be drowned and become a productive sea floor, while the present upland will have evolved into a new coastline.

PEOPLE AND THE CHANGING SHORELINE

Native Americans who lived several thousand years ago would not recognize many parts of the present coast, so great have been the changes. Even the brief period during which we have made maps and recorded the shape of the coast has witnessed shoreline change. Peninsulas have become islands and islands have become submerged shoals.

Most of these changes have aroused little public concern, because historically, people have simply moved to accommodate the rising sea. It has only been in the past century, and especially during the last few decades, that people have moved in such large numbers onto the coast that accommodation is difficult. Simultaneously, it has been during this century that we have recorded the most rapid rise in sea-level in several thousand years; a rise that may be partly attributed to our own burning of fossil fuels.

There is little we can do to prevent the rise of the sea. Many properties built too close to the ocean will be annually claimed by ocean storms trying to push our beaches landward. Millions of dollars will be required to maintain seawalls and other engineered structures built to hold back the sea. Efforts of this kind may be feasible in places like Boston, where most of the city rests on the filled remnants of tidal flats and salt marshes. Such highly populated low areas will be walled and drained by pumps just as New Orleans and the Netherlands are today. Less extensive development, such as exists along our beaches and eroding bluffs, however, will probably not be protected. The costs will be too great for individuals to bear. At the same time, the loss of productive coastline may be too much for the public, and a day of reckoning is coming for each location along the coast of the Gulf of Maine: Do we armor the shore or retreat landward?

The costs of engineering and the associated aesthetic and ecological losses of halting the natural process that formed the present Gulf of Maine will hopefully lead to a wiser strategy to accommodate the sea than has existed for the past few decades.

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This article is excerpted from the Gulf of Maine Environmental Atlas, a joint project with Bigelow Laboratory in West Boothbay Harbor, to be published by the Island Institute in 1994.



THE SYSTEM IN THE SEA

In fisheries, it's time to face the facts

LLOYD M. DICKIE

WORLD FISHERIES are in serious difficulty. Until the facts of the deficient management aspect of this difficulty are recognized, the communities of New England, Nova Scotia, Newfoundland, and elsewhere that depend on fisheries will be plagued by troubles. I believe that this has not been seen with sufficient clarity from within the technological organizations. It can't be. After all, they have a vested interest.

So I think it's very important that we take a fresh look at things when the need is great. At the same time we have to recognize that our interpretation of any situation depends on our point of view as much as it does on any information we might have. We need to find ways to work together to ensure that these management institutions can act responsibly to meet our common goals.

Science is supposed to be based on observation and measurement. We can call it experience as well. However, in fisheries for a long time—I would say for at least 20 years in my experience—there have been many observations made, often by people who participate in fisheries and by others who are associated with them, which don't make much sense in relation to current theory about how populations work.

Let me outline a few things that are fairly important. First, although there have been many signs of heavy fishing which were making it more difficult to catch fish, the total landings of the fisheries actually haven't changed very much. It's just like the lobster fishery in Maine. While the total landings in the Gulf of Maine fisheries have stayed more or less constant, species composition has been changing a lot. And that is not looked at by current fisheries theory at all. It's one of those facts that is not taken into account in the way we manage our fisheries.



Peter Ralston

More than a boat name, a pointed commentary on the present state of affairs in fisheries management.

A second fact. Landings for particular species often seem to stay constant for long periods of time and then the fishery suddenly collapses—much faster than anybody expects. There are lots of possible explanations and so we don't change anything. But it is an important fact.

A third observation. Those of you who have dealt with the biology of species know that the rates of growth of fishes change in unexpected ways. One would think that when the species are fished very heavily and their abundance is way down, the fish ought to grow much more rapidly and make up for it. But in many cases they grow much more slowly.

Finally, from the very beginning of serious international attempts to manage the haddock fisheries of Georges Bank, beginning back in the late 1950s and early 1960s, scientists found great difficulties in tracking what is actually happening because the regulations were being changed. As a matter of fact, in this particular fishery, they preserved a fleet so they could look at how it used to be compared to how it is now. They found it very difficult to understand what was happening because the distributions of the fish had changed so much.

To me, these are important facts about fishing. They are facts that affect the fishery and fishing success, yet because they are not dealt with by current fisheries theory they haven't had very much attention paid to them.

It is easy to understand that when fisheries management doesn't give the answers we expect, when resource management in general doesn't give answers we expect, one of the first things we are suspicious of is the data: get better information. The trouble is that we have been spending so much money trying to get better data that we have spent very little to re-examine the theory.



Bill Curtsinger

Administrators have been convinced that all that is needed is fine-tuning, better data. This has been an almost universal situation in world fisheries—in the North Sea, off Newfoundland, off Nova Scotia and the Gulf of Maine, and in the Pacific.

By the mid 1980s, we were seeing signs of trouble everywhere, even among the experts who were searching for ways of treating the data as a means of getting around the shortcomings. This after-the-fact approach (“there’s a problem, let’s cure it”) is very common in our society. It’s one problem that we never seem to learn the answer to. When you have a

problem so big that everybody can see it, it’s almost too late to do anything about it. When things are this serious, we can do very little except bear some of the consequences as best we can.

Sometimes we get really desperate: we go hunting for a “witch” somewhere that is causing the problem. In our most recent hunt, we’ve found a witch in environmental and climatic change. If you listen to the concerns of fisheries management, you’ll hear as one of the principal messages that climate and environment are going so wrong that the fish stocks are disappearing due to lack of new recruits.

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All of us in this international fishery have conjured up other witches as well: at one time it was the depredations of foreign fishing fleets; at other times it's been the actions of fishermen or governments or markets on the opposite side of the international boundary.

It is true that we have had some real and unexpected climatic effects showing up in our fisheries. The northern cod off Newfoundland is one very good example. But blanket explanations for what went wrong are almost always a little suspect. I personally believe we have to be careful about this one. Is climatic change, which has barely begun to be noticeable, affecting fisheries around the world in exactly the same adverse manner?

A number of years ago, an associate of mine and I had a chance to look into the very serious situation that existed at that time off the western coast of South America, in Peru, where the largest anchovy fishery in the world collapsed from its highest level down to a level less than the total landings on the East Coast from Georges Bank to Newfoundland (which were only about 15 percent of what the anchovy fishery was landing). Using an objective measure of the factors influencing the Peruvian catch, we found that both the fishery and the climate could be held equally accountable for what was taking place there. In fact, I think we could fairly say that the collapse of that fishery could not have taken place with either one of those influences operating in isolation.

What I take from this experience is that, while climate may be doing some serious things to our stocks, it is clear that unrestrained fishing, due to ineffective management, is also a problem.

We cannot be absolved of responsibility for defective management by finding that climate change is causing additional difficulties. It is for this reason that I am very much interested in the controversial action that was taken by the Conservation Law Foundation in relation to the fisheries of the Gulf of Maine. I applaud the Conservation Law Foundation and any support that it receives from others—not because it suggests that the management of the fisheries of the Gulf of Maine has been particularly bad, but because in fact the rest of the world shares this situation with us. [*The groundfish management regime of the National Marine Fisheries Service and its regional council prompted a lawsuit by the Conservation Law Foundation in 1991, which in turn resulted in a consent decree and a court-supervised timetable for writing a better plan. The action is still pending. —Ed.*] It now behooves us all to work together to ensure, first of all, that we don't let excuses distract us from the opportunity for a



David Conover

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much needed re-examination of what the court decision has allowed us. Second, I think we need to encourage much needed changes in management. The need for informed but independent voices such as the Island Institute is far from over.

I think we can find our way to better management, even if the delays caused by what I regard as witch-hunting may cost society more than if we had been able to see our way clearly earlier. Most of the government scientific institutions that supported fisheries research in the 1970s and 1980s have been very seriously degraded, but there is a legacy of information and a basis for new theory. Slowly, a new theory is taking shape and becoming linked with advances in general science that can help us build better models of population control and devise ways for testing them.

What is encouraging to me is that I believe this new theory seems to be capable of explaining some of those odd, anomalous observations that we couldn't account for before. The results of what I am about to say are far from proven. They still concern only the biology of this ecosystem and leave a lot to be understood in terms of sociology and economics. But since one of our fundamental responsibilities is the preservation of the biological condition of the stocks, it's important to begin there.

First, let me refer to those neglected observations. As I said, both the growth rates of the individual fish and the total landings in the fishery have stayed more or less the same. When that is put into terms of the biomass of organisms out

there, the total weight of animals has stayed very much the same. And this could only happen if the total energy in the system is the same as before. Somehow, this energy that is coming down from the food organisms into the complex of food chains is actually controlling the production.

Now, unfortunately, because fisheries management has always been required to concentrate on one species at a time—and even then only on the commercially important ones—the data to substantiate what I would call an ecosystem-

energy theory haven't been available from the management data. The U.S. Department of Commerce tried in the late 1980s to find some generality in what was taking place by putting together the information they had on landings by areas, but with only data on individual commercial species, of course you couldn't see very much. The data reflected pretty well what they were designed to reflect: the way individual species were changing.

But we do have observations of ecosystems, made in those broadly based scientific organizations we supported during the 1970s and early 1980s. We can use what they found to begin to test the validity of this energy point of view. Recently, some of my associates and I have been finding that it seems to work for quite a number of fisheries. If more analyses prove that this is truly the basis for fisheries production, that alone would place fisheries management on an entirely new biological basis, a different basis than the numerical population dynamics of current management systems. Looking at fisheries systems in terms of the energy that drives them would substantially deepen our understanding of those systems, and make it far more likely that the controls we impose on fishermen will be effective.

A second observation. Fisheries research has always concentrated on measuring the abundance of the stocks. If you are trying to manage the catch from the fisheries, you should know the abundance. But what else do you want to know? It has only recently been established that fishing causes changes in the area over which the fishery is distributed but doesn't change the local density.

This seems common sense. Why wouldn't we have known that before? We were concentrating so much on the total abundance that we didn't think about the local density. We tended to think of the area that the fish occupied as staying the same.

This fact alone—that the local density, rather than abundance, controls—explains a few things. One is that, because

What is a marine ecosystem?

R.V. O'NEILL, in a paper presented last summer at an Island Institute-sponsored conference on fisheries ecosystems, defined an ecosystem as "the fundamental unit of biogeochemical processing... the minimal, stable biological system."

The definition is important to a debate now underway in the scientific and fisheries-management communities. Looking at the depleted state of marine fisheries in the Gulf of Maine, on Georges Bank, and elsewhere, ecologists are asking whether it's time to start looking at fisheries as "systems," rather than a collection of individual species. Managing stocks of cod and flounder may no longer be enough, in other words; the only way to guarantee the existence of these fisheries in the future will be to consider them as a whole, linking species with external oceanographic factors.

Applying ecosystems principles to marine fisheries is not going to be easy. Some researchers would begin at the bottom and work up, focusing on environmental factors such as ocean currents that affect the growth of food organisms. Others advocate a "top-down" approach, creating huge, computerized models that take literally hundreds of factors into account. On the management side, there is disagreement over the utility of the ecosystem approach, concern that it won't be politically practical, and a natural unwillingness to admit that the species-by-species approach has failed.

Still, the cost of not seeing the big picture will be disaster, in both ecological and human terms. Ecologically, we are already seeing the collapse of groundfish stocks on Georges Bank and elsewhere. In human terms, whole communities in New England and the Maritime Provinces that depend on fishing for their existence are at risk.

fishermen only fish where there are fish, you can't see what's happening to the general abundance; you only see what is happening to the density. This also explains the difficulty of predicting when fisheries were going to collapse fast, because in fact they hold up until there is nothing much more there and then it drops very quickly.

Our regulations haven't affected the density very much, and because they haven't affected the density, they haven't actually gotten close to those factors that are controlling the production. It is density that is controlling production in the

As Ted Ames of the Maine Gillnetters Association, who attended the fisheries conference, wrote in *Commercial Fisheries News*:

The relationship of a fisherman to this system is complicated. At first glance, he may seem to act as a selective predator because he targets a particular kind of fish.

But he interacts with the system in a completely different way than a natural predator. In fact, he is actually responding to market pressures. The economic system drives the fisherman, not the fish in the ecosystem.

The amount taken by a fisherman is limited only by the size of the "belly" of his boat, the fish hold.

When a vessel size is unrestricted, the fisherman is able to effectively bypass even this constraint, making market demand the only factor controlling his fishing effort.

When a predator gets full, it stops eating; a fisherman does not. He continues fishing until either the boat is filled or the fish are gone.

As Lloyd Dickie pointed out last fall at the Island Institute's Annual Conference on Hurricane Island, we have failed to face facts about our fisheries and blamed externalities like climate change instead of the obvious culprit, overfishing. "We need new blood, new bodies, new points of view," Dickie said, applauding efforts to redirect the discussion.

Seeing fisheries as the ecosystems they are, Dickie and others are telling us, would be a good beginning.

—David D. Platt

*The Island Institute has recently published *The System in the Sea*, an account of last year's Fisheries Ecosystems Management Conference. The publication is in two volumes, one for interested citizens, the other for the scientists. Copies are available through the Institute.*

system; not the total abundance. And so we have to look at fisheries management from this point of view.

This theory of an energy balance working in fisheries ecosystems seems so simple, and yet it's only when we start developing methods based on it that we begin to see how the influence of the food chains has been affecting the output from the fisheries. Previously, a lot of food chain analyses were done, but they didn't seem to make much sense. Now I think they are beginning to make sense.

I am going to leave for now the question of individual species and their con-



Peter Ralston

trol, because we don't really know very much about that. I can say, however, that although the total biomass responds in reasonable ways that probably can be managed, it is going to cost us a lot more if we also want to control biomass by species, because the species don't respond as easily as the total biomass does.

So we have various management options. It may be, for example, if we controlled sizes, we would also indirectly control something about species and abundance. But these are things we are going to have to work out for the future. What I think we have at the moment is a reasonably solid energy theory for fisheries regulations.

The lesson of how to control technology is apparently very difficult for us all to learn. I think that our society needs, above anything else, independent voices which are intelligent and informed to help us question the technology, to do the re-examination that is periodically needed. Too often we are at the mercy of the large management organizations typical of our technology. They show not just the inevitable momentum, but a virtual gigantism. To counteract those tendencies we need new blood, new bodies, new points of view. On this account, in particular, I thank you for inviting me to talk to the membership of the Island Institute and I'd like to extend to you and especially to what I consider your inspired leadership my congratulations for sustaining this effort.

(This article is adapted from remarks delivered at the 1992 Island Institute Annual Conference.)

Lloyd M. Dickie is a marine biologist associated with the Bedford Institute of Oceanography in Dartmouth, Nova Scotia. During the summer of 1992 Dickie took part in an Island Institute-sponsored conference on fisheries ecosystems at Harvard University, at which participants stated that ecosystems principles could be applied to marine fisheries. Dickie holds a Ph.D. in zoology from the University of Toronto.



WHO WERE THEY?



From prehistoric times, the Native people of the Gulf of Maine have been responding to its changing ecology

ARTHUR E. SPIESS

WHEN WE prehistoric archaeologists present ourselves to the public, we are usually asked two very basic questions. The first is, "Who were they?"—these people whose actions made all the stone tool fragments and left all those piles of shellfish and animal bones. Second, we are often asked in much more subtle and variant forms, "What good is archaeology?" Besides being entertaining and putting some time-depth into our view of the world, does archaeology have any practical use in solving today's problems?

Certainly it does along the coast of Maine, where prehistoric archaeology is particularly interrelated with environmental study. The last two decades of doing archaeology along the coast and among the islands have taught us much about past Native American life, the ecology of coastal Maine, and how both have changed over the last 10,000 years. Our understanding of how our distant forbears adapted to that changing ecology

provides a deeper baseline of information than we can get from modern ecological studies alone. And at the same time, we can flesh out the old bones and reconstruct something of the human lives as well as the environment in which they lived.

RECORDS IN SHELL HEAPS

A fortunate circumstance of coastal Native American life was periodic collecting of shellfish and subsequent discard of the shells (along with the rest of the garbage) around the place of residence, forming what archaeologists call shell middens. These shells neutralize the usually acid Maine soil and consequently preserve food animal bone, bone tools, and an occasional human and dog skeleton that would otherwise have rotted away within a century. The presence of thousands of food animal bone fragments in shell middens allows us to reconstruct the hunting and fishing economy and seasonal movements of the Native Americans. In addition, it allows us to monitor changes in fish and game frequency over time scales

of millennia. Long before we had annual reports of fish and game commissioners, conscientious Native housewives were cleaning the floors of their wigwams and throwing the garbage onto the shellheap, leaving a comprehensive record of their environment.

As Maine coastal archaeologists learn about environmental changes in the past, we can also make contributions to the study of future environmental changes. We know that the coast of Maine is sinking rapidly, at least in geological terms. The Penobscot Bay region is sinking at a rate of about one millimeter per year, while the area around Eastport is sinking about nine millimeters per year. If this rate were constant over the past thousand years, a campsite on the central coast of Maine built at the high tide line 1000 years ago would now be under more than three feet of water (or would likely have been destroyed in the process of submergence). In fact, the oldest intact Indian site yet recovered from the coast of Maine is only 5000 years old. There are very few coastal sites with components older than 4000 years of age. But there are several places where scallop draggers have repeatedly recovered stone tools dating from 6000–9000 years old from gravelly bottom between 5 and 20 fathoms of water.

So the older coastal archaeological sites survive only a scattering of stone tools on the inshore bottom. This environmental-archaeological connection is an important one, but let's first take a look at "Who were they?"

FROM HISTORY TO PREHISTORY

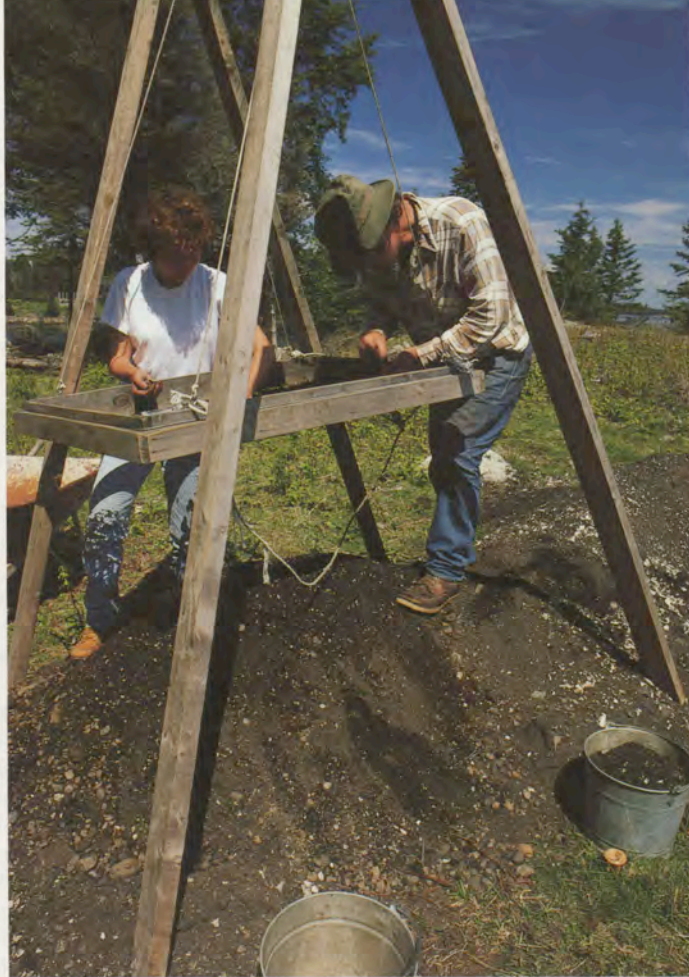
Ten years ago we began three short seasons of work on a small shell midden on Allen Island, at the request of the Island Institute and the island's owner, Betsy Wyeth. Primarily we were there to determine whether the site was significant, and secondarily to test for evidence of George Waymouth's visit in 1605. We found instead a wigwam and fire hearth floor containing European clay tobacco pipes dating from about 1675 A.D., overlying a second wigwam floor of about 800 A.D. Both wigwams had been occupied during the summer, and both groups had been making a living the same way: catching fish, hunting birds, and trapping the now-extinct sea mink (*Mustela macrondon*). This site showed that there were some basic continuities in life along the Maine coast which had remained stable for millennia, until even after the initial European contact suggested by the clay pipes.

There were few European trading voyages into the Gulf of Maine during the 1500s except perhaps a few by Basques. According to recent research by Bruce Bourque and Ruth Whitehead, much of the movement of European goods (utilitarian copper and iron and decorative items) into the Gulf of Maine during the

16th century was done by Micmac (Souriquois) Indian traders who had originally obtained their goods from Europeans in the Gulf of St. Lawrence as early as 1530. The prehistoric archaeological record of intensification of fur trapping (bones of certain species) and trade in raw materials used to make stone tools hints that a Native trade network involving furs and raw materials had been in place and operating from New England to Labrador before the first Europeans had arrived. At first, European goods were transmitted along this "preadapted" trade network. Sustained European presence, and with it direct and indirect interference in Native American affairs in the Gulf of Maine, began only with Samuel de Champlain and George Weymouth, around 1605.

Between 1605, when Champlain's account first specifically mentions Maine ethnic groups, and 1676 when the Indian wars brought drastic change, three ethnic groups (tribes) inhabited the peninsula that is today Maine and the Canadian Maritime Provinces. From northward to southward these are the Souriquois, Etchemin, and Abenaki. Farther south along the coast were a series of Massachusetts-speaking groups. The Souriquois are (primarily) the ancestors of the modern Micmac; they inhabited what is now Nova Scotia, New Brunswick, and possibly northeastern Aroostook County, Maine. The Etchemin were the primary ancestors of the Maliseet and Passamaquoddy. In the early 17th century, they lived on tidal rivers and the coast between the Kennebec River and the Saint John drainages. The Etchemin inhabited the mouth of the Saint John, at a village named Ougoudi, although the Souriquois used the river valley further inland. A similar pattern occurred at the western edge of Etchemin range: they inhabited a village near the mouth of the Kennebec on the east side, while upstream another group had a village at Norridgewock.

Souriquois and Etchemin were hunters, fishermen, and gatherers of wild plant foods. The inhabitants of Casco Bay and the Saco River mouth were agricultural, growing corn and beans. Champlain originally called them Almouchiquois in his 1604 account. By 1629 he refers to an agricultural group living at Norridgewock as *Abenacquiouit*, now "Abenaki." We assume that the Abenaki and Armouchiquois were one people, and that Champlain had learned that the latter name was an epithet. It was a Souriquois word related to "dog."



Peter Ralston

Swordfish hunting disappeared—and the Red Paint people with it.

ETHNIC GROUPS AND VILLAGES

After the Indian wars began, these names changed. Between 1676 and 1692, two terms were used for Native Americans living east of the Kennebec: "Caniba," referring to expatriates from the Kennebec River who had joined people already living on the Penobscot in 1676, and "Maliseet." "Etchemin" disappears. Also beginning about 1650, French colonial authors increasingly used the term "Abenaki" to refer to a greater and greater proportion of the Indians in Maine and the Maritime provinces, making the term ultimately a general one. The Penobscot tribe descended primarily from people living in the Penobscot after 1700. Following the American Revolution, the Maliseets were split by the new border between the United States and Canada into Maliseet and Passamaquoddy.

So answering the question "who were they?" gets a bit complex. Tracing these ethnic groups backward into prehistory more than a few centuries involves major assumptions about the correspondence between certain styles of making ceramics or arrowheads and linguistic or ethnic groups, assumptions that most archaeolo-

gists are not willing to make. The answer for prehistoric inhabitants of most Maine archaeological sites is "they were Native Americans," and their language was probably related to modern Algonkian languages such as Penobscot or Maliseet. What they called themselves will never be known.

The focal points of early 17th century Indian life were a series of villages occupied for most of the year, each with a geographic name and one or more sagamore (chief or headman). The inhabitants of each village often dispersed to smaller, seasonal campsites for one or a few families. In 1614 John Smith found Penobscot River and Bay "well inhabited with many people, but they were from their habitations, either fishing among the Iles, or hunting the lakes and woods.... [O]ver all the land, iles or other impediments, you may well see them sixteene or eighteene leagues from their situation" —that is, up to 50 miles from their home village during the season of dispersal. All settlements were located on some sort of water shoreline (island, coastal, river, or lake). The large, multi-seasonal villages were located in estuaries along the coast and along the middle and lower reaches of major rivers. The furthest village inland on the Kennebec was at Norridgewock.

In 1605 George Weymouth kidnapped five Native Americans from the vicinity of Allen Island and brought them to England, where they were taught English. A census of sorts, apparently derived from these captives' recollections, was published in 1625 by Samuel Purchas. Twenty-two villages were reported on the drainages from the Union River (Mount Desert Island area) westward to the Saco, each with between 30 and 160 households and between 90 and 400 men (except one small one with eight households and 40 men). Making some assumptions about proportions of men, women, and children, the largest villages may have been home to 1000 souls. Asticou's village, on Mount Desert Island, was reported by Purchas to have 50 houses and 150 men (400–500 persons). In the summer of 1613 the village was described as an area of 20 to 25 acres cleared of trees, with grass in some places to the height of a man.

The total population of tidewater Maine from Mount Desert Island to the Saco, inclusive, was probably about 12,000 people. Perhaps 20,000 to 25,000 people lived in what is now all of Maine. This population began to decline drastically in 1617–1619 with the first major epidemic



PRE-ARCHEOLOGICAL DIG — Mining for lime at the Damariscotta Mills oyster middens around the turn of the century

of a European disease to sweep along the coast into southern and central Maine.

On May 12, 1605, Waymouth anchored in the Georges Islands (now Allen, Burnt, and Benner), and found evidence of hearths and food animal bones lying on the surface of an unused campsite. At 5 p.m. on May 30 three canoe-loads of men, women, and children arrived, started fires, and made camp. The account of the voyage records the delivery of a major oration by one of the arriving men, probably the senior member of the group. Perhaps it was a welcoming speech, but it could just as easily have been an expression of indignation and request for the English to depart. Since Waymouth's ship had been in the islands for two weeks, and the English had explored thoroughly, these Etchemin (we now know) had just arrived from the St. George estuary for their summer season stay. Archaeological work on several islands off the Maine coast have confirmed that "outer" islands were used during the summer only. The shell heaps in inner islands (including North Haven and Vinalhaven in Penobscot Bay) and in the estuaries, indicate multi-seasonal or year-round use. Some Native Americans lived year-round on the coast of the Gulf of Maine, as implied by Purchas' census. Thus, at least some of the larger shell middens on inshore islands and in estuaries were the "home base" villages, each probably with a name and sagamore. Although the largest still stretch for 150 or 200 meters along the shore, coastal erosion has destroyed much, so that none now cover 20 acres. Smaller shell middens may be seasonal camps or amalgamations of a series of seasonal camps.

At present there is no evidence for the longevity of the named home-base villages, although they may have been moved to new locations once every 20 years or so. Neither was this kind of population distribution stable over centuries. As we archaeologists look into the past, we notice that there are fewer (and perhaps larger) coastal sites dating between 1000 A.D. and European contact (1600 A.D.)

Long before we had annual reports of fish and game commissioners, conscientious Native housewives were cleaning the floors of their wigwams and throwing the garbage onto the shellheap, leaving a comprehensive record of their environment.

than there were between (for example) 400 A.D. and 1000 A.D. Moreover, the evidence indicates more intensified trade among Native Americans in the few centuries before European contact. Some archaeologists now think that the Native American population was amalgamating during this period into larger but fewer villages, and that the power of the sagamore, which probably involved political and trade contacts outside the village, was increasing.

The archaeological evidence for such political and social changes is sketchy, but we have a much more solid data base for reconstructing past environmental changes, their effects on human subsistence and economy, and vice versa.

We have now located about 1530 shell midden archaeological sites along the Maine coast. Most are located on inshore islands and estuaries. A study of shell midden site locations in the Boothbay and Muscongus Bay areas by Douglas Kellogg revealed the primary factors in the decision to use a particular coastal spot as a village campsite. The first consideration was all-tide access for a birch-bark canoe: the vast majority of shell middens are located adjacent to a (large or small) cobble, gravel, or sand beach which extends from high to low tide. Such a landform will allow beaching a canoe with relative

ease without consideration of tidal cycle. There are also very few sites located on shorelines fronted with extensive mudflats where low tide canoe travel would be impossible. Some features once considered important, such as the presence of a source of fresh water in a spring or small stream, are so ubiquitous that they did not demonstrably affect campsite or village location decisions. Although avoiding mudflats directly in front of a site, shell middens were located a short walk or paddle away from a good clam flat.

CHANGING CONDITIONS

Ecological change has affected many aspects of the coastal environment during Native American habitation of Maine. As described earlier, the coast of Maine has been slowly sinking relative to sea level for at least 10,000 years. Radiocarbon dates on shells show that the 9000-year-old shoreline near Seguin Island is now under 65 feet of water. I have already mentioned stone tools from an eroded campsite underwater near Deer Isle. The campsite is associated with an underwater channel (drowned estuary) which preserves patches of large oyster shells. A radiocarbon date of the oyster shells proves that the 6000-year-old shoreline near Deer Isle is now under about 30 feet of water.

Oysters prefer brackish and relatively warm water compared with soft-shelled clams. So, while clams may not have been as common several millennia ago, oysters or some other species of shellfish were available. The oyster shell heaps at Damariscotta represent a localized survival of the estuarine conditions necessary to maintain a major oyster population. Deposition of these oyster shell middens by human harvesting began about 2000 years ago and ended with European contact. Most of the rest of the shell middens along the coast are composed of soft-shelled clam and mussel.

The Gulf of Maine is a unique body of water where some extreme tides are caused by the geometry of the water body. While the Gulf has become deeper and larger as the land has subsided, the tidal mixing in the Gulf has increased. Before about 6000 years ago, tidal range was much lower than it is today. Because tidal mixing pulls cold water off the bottom of the Gulf and mixes it upward in a large upwelling off the eastern Washington County coast, the Gulf has also become colder and foggier.

We know that until about 3800 years ago the summer surface waters of the Gulf of Maine, and Penobscot Bay in particular, were warm enough to support large numbers of swordfish. This species is now largely confined to the warm, offshore Gulf Stream. But the people of the Red Paint (or Moorehead Phase) culture around 4200 to 3800 years ago, and their predecessors at least as early as 5000 years ago, successfully hunted them. One axiom

of archaeology is that people butcher large animals near the kill site, and don't haul bones and viscera around unnecessarily. If swordfish were being hunted offshore, then outer island sites of this age would be the only ones full of swordfish bone. However, several sites at the inland end of Frenchman's Bay are packed with swordfish bone, including backbones and ribs. We therefore conclude that swordfish swam inshore among the inner islands and bays.

Sometime about 3800 years ago, the cool upwelling water became strong enough to affect inshore coastal ecology along the central and western Maine coast. The change was rapid, but not instantaneous. Swordfish hunting, and the Red Paint people with it, disappear to be replaced by other, immigrant folk. The coastal subsistence of even later people, after 2000 years ago, including the ancestors of the Etchemin, was based on high inshore and near-shore biological productivity maintained by the high tidal range and cool surface waters. Sturgeon,

flounder, sculpin, and juvenile cod became the most important fish, most probably taken in shallow water with the aid of tidal nets and weirs or fish spears. The proportion of shorebirds, ducks, and geese in the food supply increases, which must reflect larger bird populations. And the number of seals in the food bone samples grows continuously until European contact, another indicator of increasing inshore productivity.

These ecological changes are reflected in coastal terrestrial ecology, too. The coastal spruce forest strip appears to have widened and extended westward to its present western limit in eastern Casco Bay over the last few thousand years. Moose and caribou would be favored by such forest cover, and white-tailed deer would be reduced by the decrease of hardwood-dominated forests. If we look at the 4000-plus-year sequence of occupations at the Turner Farm shell midden on North Haven, there is a tenfold increase in the number of moose killed for each 100 deer killed (two for 100 became 20 for 100) at

this one spot beginning 4200 years ago and ending with the last sample about 800 years ago. Caribou, that supposed denizen of northern Maine which was extirpated by sport hunting about 100 years ago, shows up in coastal shell middens along the Washington and Hancock county coast after about 2000 years ago, but not farther westward.

Archaeological data accumulate slowly. Archaeology is not an experimental science in the sense that repetition of a laboratory experiment constitutes "proof." Instead, the total accumulation of facts over decades and centuries of archaeological research allows us to advance our understanding of the past. Perhaps in the next decade we will be able to see more clearly backward from about 1600 A.D. into the more distant past, and understand more fully how people have responded to the changing ecology of the coast of the Gulf of Maine.

Arthur E. Spiess is an archeologist with the Maine Historical Preservation Commission.

Bliss Island, New Brunswick: Unearthing Colonial History

Samuel Bliss fled his native Massachusetts for Canada in 1784, having incurred the wrath of his one-time neighbors by remaining loyal to the British during the American Revolution. He landed on an island in Passamaquoddy Bay off Black's Harbour, New Brunswick, and eventually received it as a land grant from the province. He lived on what became known as Bliss Island for 19 years.

In the mid-1980s, David Black, a University of New Brunswick archeologist looking for prehistoric remains, discovered what appeared to be the site of Samuel Bliss's house. Except for a rock-filled depression where the cellar may have been, no surface trace of the building remained.

A few inches underground, however, the picture changed dramatically. In late July 1992, as Black and a team of students opened the site for a look, a variety of items came to light—a brass button bearing a Massachusetts emblem, hinges, pottery shards—indicating this was, indeed, a place where European settlers of Bliss's time had lived. "That button's like a telegram from the past," remarked Black as he showed it to a visitor a few days later, pointing out the standing Indian with the word "Massachusetts" on the front and the legend "London extra quality" on the back. Further research on the button could reveal more—whether it was made for the Massachusetts Loyalist militia company in which Samuel Bliss served as a lieutenant, for example.

An archeological dig like the one at Bliss Island can fill gaps in current knowledge about the history of the Gulf of Maine—the years when groups of people inhabited or abandoned particular places, what they lived and ate, what populations of animals and fish existed at the time. The evidence suggests that Bliss lived in a stone house (few nails have been found) that had brick chimneys at either end (there's no sign of the customary center chimney). Bones suggest a diet of meat and fish. From the historical record, we know when Bliss came to the island and when he died. *Where* he died isn't clear—there are no known graves on the island.

More objects came to light as the students dug downward—glazed stoneware, vitrified china, blown glass with a "pontil scar" where its maker separated it from his blowpipe. Student Mark Edwards found a large key; Cynthia Adams came up with examples of stoneware that can be dated by their glazes.

Isolation and shared experience brought the group closer as they worked on the island. "We're 11 best friends," remarked Katie Hovey, a student from Saint John, N.B., after 10 days on the job. A few of the students stayed in tents, while most lived in two abandoned Coast Guard houses at the south end of the island. The Canadian Coast Guard maintains an automated lighthouse there. All undergraduates at the University of New Brunswick, the students paid just under \$500 tuition apiece to work 22 days on the island under the supervision of Black and historian Chris Blair, as well as Blair's



Bliss Island dig

Christopher Ayres

wife Susan, an archeologist with the Provincial government.

During their 1992 dig the archeologists unearthed nothing suggesting that the Bliss homestead site was occupied after 1803. "It's essentially undisturbed after that," said Blair. "That's rare." The house may have stood, unoccupied, until sometime in the 1840s.

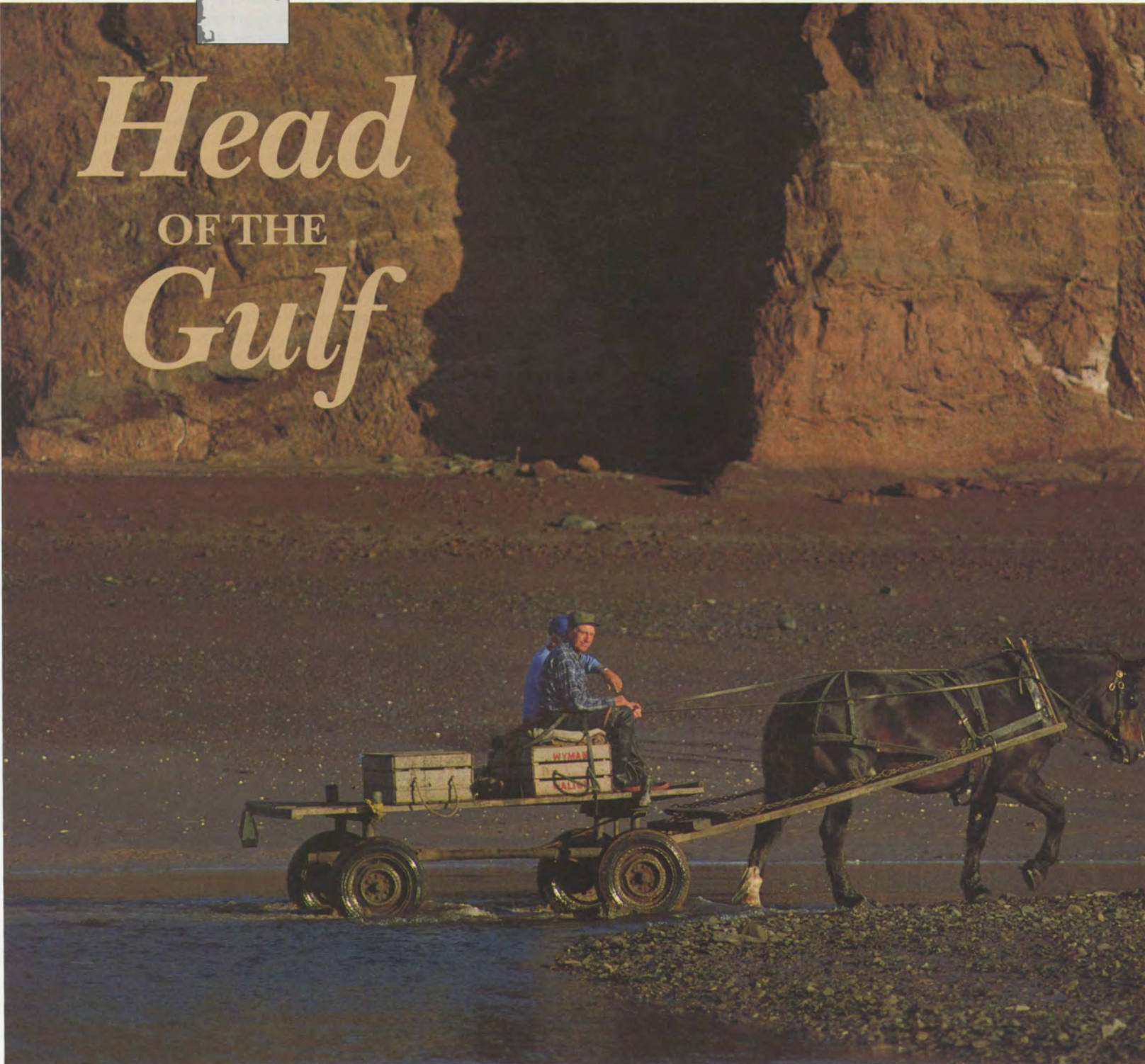
Dividing the homestead site into a checkerboard of one-meter squares, teams worked their way slowly down into the island's thin soil with trowels, dustpans, and brushes. A layer at a time, they sifted through all the soil they removed, picking out fragments of bone, iron, mortar, brick, and other things suggesting human activity, mapping everything as they went. To protect the site from rain at night, they covered their diggings with plastic sheets.

Sea level in parts of the region is rising (see accompanying story by Arthur Spiess) and some prehistoric sites have already been lost. "We check sites periodically," Black said. The Bliss site is close to shore, but there's been no loss yet.

—David D. Platt



Head OF THE Gulf



Above: Weirman Gerald Lewis of Five Islands, Nova Scotia, heads home with a couple of crates of flounder.

The life and tides of Fundy

HARRY THURSTON



TWICE DAILY THE great tides of Fundy—world renowned for their 50-foot height—meandered along the umbilical loops of the marsh-fringed Chebogue River at the mouth of the Bay of Fundy and inched into the saltwater farm creek where I grew up. In season, a stream of living things moved with the tides. In April, smelt crowded so thickly into the creek mouth that I could snag them barehanded. Soon after, sea trout slipped from salt to fresh water and lay tantalizingly off the end of hook-and-line in the shaded spawning pools of Brook Farm. Each summer, willet scolded me when, crossing over the raspy carpet of chord grass, I ventured too close to their salt marsh nests. Blue herons were prompt as biological clocks, at daybreak flying in to work their riverine feeding grounds and at dusk seeming to ferry night itself within their gangly silhouettes as they returned to an island heronry. Striped bass worked the shallows, and juvenile “tinker” mackerel shot upriver in late summer; shorebirds and ducks trailed the parade until freeze-up. Looking back I see that the tidal river, like a great saltwater heart filling and emptying, first brought me close to the riches and rhythms of nature, and of the Bay of Fundy in particular.

Where there is natural abundance, there is also human greed. I learned this unnatural lesson as a fresh-faced biology student working in the regional fisheries inspection lab in Yarmouth, Nova Scotia, in the late 1960s. Daily I analyzed the protein content of the greenish slurry excreted from herring meal plants—10 foul-smelling factories grinding hundreds of thousands of tons of perfectly edible herring into fish meal. By summer’s end, the grinders and coolers were silently rusting and the 60-strong herring seiner fleet was tied up. The stocks of this vital species—feed stock for fish, whales, and seabirds—had been decimated; some populations, like those on Georges Bank, have never recovered.



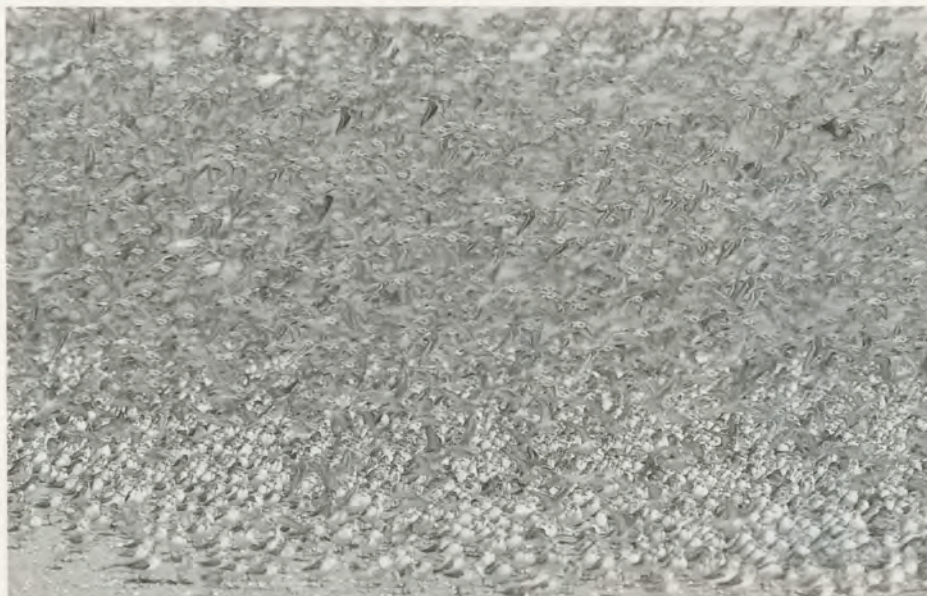
It would be another decade, this time at the farthest reaches of the Bay of Fundy, before I would face up to another threat to this uncommonly productive body of water. With the OPEC oil embargo fresh in their minds, politicians in New Brunswick, Nova Scotia, New York, and the New England States revived the perennial dream of exploiting the tidal energies of the Bay of Fundy. Nearly half a century earlier, the U.S. Army Corps of Engineers, under the direction of Franklin Delano Roosevelt, had first studied the feasibility of large-scale tidal power plants in Passamaquoddy Bay, near the President’s summer residence on Campobello Island. The tidal power dream has risen phoenix-like every decade since, and in 1978 seemed more imminent than ever before.

The schemes called for the erection of massive dams to block one or both of the inner arms of the Bay of Fundy—the Minas Basin and Cumberland Basin. The impact of shortening the length of the Bay would be felt as far south as Boston, where high tide levels were expected to rise as much as six inches, and in the vicinity of the dam, where productive salt marshes would be drowned and sensitive bottom sediments disturbed. I was living near Joggins, the earmarked Nova Scotia terminus of the Cumberland Basin dam. Suddenly I had to contemplate what a wholesale habitat change might mean for the productivity of my beloved Bay.

Top: Twice daily the muddy waters of Fundy’s inner reaches recede to reveal seemingly limitless clam flats. But these, too, are under pressure as a new generation of clambers, forced onto the flats by hard times in the 1980s, abandon traditional conservation techniques.

Top right: Marven Snowden, a Fundy shad fisherman, pulls in his gillnet.

Stephen Homer (5)



Semipalmated sandpipers at roost site, Mary's Point, New Brunswick

My education, both formal and informal, had coincided with the rise of environmentalism. Now, at least, megaprojects such as Fundy tidal power could no longer be undertaken without an environmental review. Regional scientists moved quickly to address a host of questions about the Bay of Fundy which, though in their backyard, had remained largely unexplored from an ecological viewpoint. I joined the quest. For the next 10 years I followed scientists, naturalists, and fishermen from one end of the Bay to the other, from the Tantramar Marshes, the great maritime prairie that bridges the Maritime provinces of Nova Scotia and New Brunswick, to the seabird sanctuary of Machias-Seal Island that straddles the invisible marine boundary between the Bay of Fundy and the Gulf of Maine.

One of the first revelations came from the computers at the Bedford Institute of Oceanography in Dartmouth, Nova Scotia. Numerical models showed that the Bay of Fundy and Gulf of Maine formed a single oceanographic system, a perfect bathtub in which Fundy's conspicuous tides sloshed back and forth harmoniously—a phenomenon known as resonance, or more simply "the bathtub effect."

The study of Fundy as a living system put its high productivity into perspective. Graham Daborn, founder of the Acadia Center for Estuarine Research, has dubbed the Bay of Fundy "a system with a biological pump at both ends." In the lower Bay, strong tides pump nutrients from the seafloor up into the light, which sets in motion the marine food chain: phytoplankton, copepods, herring, seabirds, and whales. In the shallower upper Bay, huge expanses of mudflat and saltmarsh act as biological factories. At low tide slicks of single-celled algae and fields of marsh grass collect solar energy, then distribute it to the marine system at high tide as a nutrient soup for bottom

dwellers, fish, and birds. This vast marine smorgasbord attracts migratory species from far hemispheres.

In short, scientists concluded that the real power of the tides rested in their ability to promote and sustain biological productivity.

But it was only in the field—among the pageantry of whales spouting, seabirds gorging on red rivers of krill, shorebirds unfurling in poetic flight patterns—that I found the truth of this generalization took on vivid meaning.

To the uninitiated the muddy waters of the inner reaches of the Bay of Fundy might look like a watery desert. Closer inspection proves they are far from barren.

Several years ago, I stood on the high marsh, watching as the brown tide inexorably transformed the mud-walled, dry-bottomed Allen Creek into a navigable channel. Marven Snowden, of Wood Point, New Brunswick, quickly powered his boat into the open waters of the Cumberland Basin where four generations of his family had fished for American shad, the largest, and most succulent, member of the herring family.

Marven had seen many changes in the fisheries of the upper Bay of Fundy. His grandfather fished during the heyday of the shad fishery at the turn of the century. Then, hundreds of thousands of pounds were salted in barrels for export to the Eastern Seaboard. During his father's time, the fishery had collapsed suddenly. In recent years, Marven had seen the shad making a comeback.

The burly fisherman steered toward the Nova Scotia side of the basin. He knew that shad move with the strongest currents. "You try to get in the strongest stream and work toward the slack water," he explained as his son and another crewmember set the two kilometers of gill net.

We cut power and drifted on the tide. Marven freely shared his local wisdom.

There are three distinct runs of shad in the upper Bay, he told me; and fish come here to feed not to spawn.

In recent times, science has often ignored local data gatherers—the fishermen. Fortunately, Dr. Michael Dadswell, then a federal fisheries research scientist, stationed in St. Andrew's, New Brunswick, was willing to listen to Marven Snowden. Though he says that his first meeting with Marven in 1978 was a case of serendipity, Dadswell deserves credit for piecing together the information into a workable hypothesis.

Science sometimes advances in leaps, like salmon or poetry. Dadswell had a hunch that the increase in Fundy shad might be related to the restoration of major shad spawning rivers in the United States, such as the Susquehanna, Delaware, and Hudson. As anadromous fish, shad spawn in fresh water and then return to the salt water. It was a long-standing mystery in fishery science, however, just where the shad went after returning to the sea.

Dadswell asked Marven to help him tag shad in the Bay of Fundy. The next spring the florescent dorsal fin tags began returning with southern postmarks. Eventually, he received tags from every river with a known spawning shad population, from Florida north to Labrador. He now believes that every shad comes to the Bay of Fundy at least once during its life history.

Other species return annually to the rich feeding grounds spread out by the ebb and flow of Fundy's tides. No migration is more spectacular than that of the sandpipers, or "peeps" as Fundy denizens affectionately call them. The peeps flock to special places along the upper Fundy shoreline to feed and, it seems, to perform their aerial ballet.

Hundreds, thousands, tens of thousands of sandpipers spiral from the mudflats like snow devils, then string out in sinuous banners of flight. The play of light on their dark backs and buff breasts, as the flock banks in perfect synchrony, is designed to foil a raptor's strike. But to the appreciative observer, the birds' flight seems nothing less than joyful expression, like a musical chord or brush stroke.

Much of the sandpipers' time, however, is spent on the flats in more pedestrian fashion, doggedly bobbing up and down in pursuit of the "mud shrimp." These fatty, translucent morsels are tucked into the fine tenements of mud in astronomical numbers—20,000 to 60,000 per square meter. On this side of the Atlantic, they are found only in the Bay of Fundy and Gulf of Maine, and then only in great enough numbers at several sites to attract major shorebird flocks.

One of these mud shrimp hotspots is Mary's Point, New Brunswick. From a sandpiper's view, it has everything: the

fertile muds of Ha Ha Bay on one side, the salt marshes of Shepody on another, and, in between, a crescent sandspit for roosting.

Sandpipers arrive here unerringly, on or about July 18, from their Arctic breeding grounds. For them it is a fuel stop, or as one ornithologist remarked, "a fat station." In two weeks, they will double their weight, becoming winged butterballs. That envelope of fat will carry them on a three day, non-stop flight over the Atlantic to their wintering grounds on the north coast of South America.

It has been known since Audubon's time that the inner Bay of Fundy is an important staging area for shorebirds. But it was not until the late 1970s that biologists came to appreciate that it is the most important shorebird site in eastern North America, annually hosting some 1.5 million shorebirds of 34 species. By far the most numerous are the semipalmated sandpipers. In a given year, one-half to three-quarters of the eastern North American population stops to feed on the inter tidal offerings of Fundy's mud flats.

There to greet them for the last two decades has been one of the Maritime's extraordinary naturalists, Mary Majka. Mary's restored farmhouse and beachside cottage stand vigil over Mary's Point and its migrants. "We know from history that many species have been extinguished because they couldn't be as flexible as human beings," Mary once observed as we sat on the beach next to a roost of 30,000 sandpipers. "And I think that certain species are very much more dependent on special environments, and those birds definitely are. They certainly cannot survive without the Bay, its tides, and its beautiful mud."

The truth of Mary's words received official sanction in 1987 when Mary's Point was dedicated as the first Western Hemispheric

"Certain species are very much more dependent on special environments, and these birds definitely are.

They cannot survive without the Bay, its tides, and its beautiful mud."

**Mary Majka, naturalist
Mary's Point,
New Brunswick**

Shorebird Reserve in Canada—a critical link in the migratory chain.

Naturalists, conservationists, ecologists, environmentalists. By whatever name we choose to be called, all take it upon ourselves to understand, describe, and ultimately conserve communities of life—that is, ecosystems. In my experience, there is another kind of environmentally friendly individual who does not necessarily articulate "green" principles, but whose very life is an unselfconscious object lesson in how to merge economy and ecology.

Let me introduce one such person.

In the ice-free months, April to October, Clayton Eagles of Five Islands, Nova Scotia, can be found on the intertidal prairie exposed at low tide in the Minas Basin; one of 200 Breughel-like figures bent at the waist, arms outstretched in the shape of a human tripod.

In the 1940s, when Clayton started clamming, diggers took only the larger clams because the smaller ones were uneconomical to shuck. Clayton can't break himself of the habit. On every dig, he still plucks out only the choice, mature

clams and leaves the rest. This traditional conservation technique seems to have been abandoned by the new generation of clambers forced onto the flats by hard times in the 1980s. This unchecked exploitation of the resource haunts Clayton.

"They think I'm crazy, I don't like diggin' everything. I don't know, clams got to have somewhere to start," he told me on a discouragingly poor, digging day. "Years ago, there used to be breeding beds, we'd call them. We never used to dig them at all. They started diggin' them out. I think it made a difference. I just can't see it. You dig everything out, what's going to be left to grow?"

In Fundy, the great tides dominate all living things—from the microscopic glass house of the benthic diatom to the 70-foot leviathan, the fin whale. Survival here depends on the ability to adapt to tidal range and rhythm. I have found that this principle can hold as true for people as it does for plants and animals that live by and under the Bay's waters. And no person I met along the Bayshore lived more in tune with the tides than Five Islands' weir man Gerald Lewis.

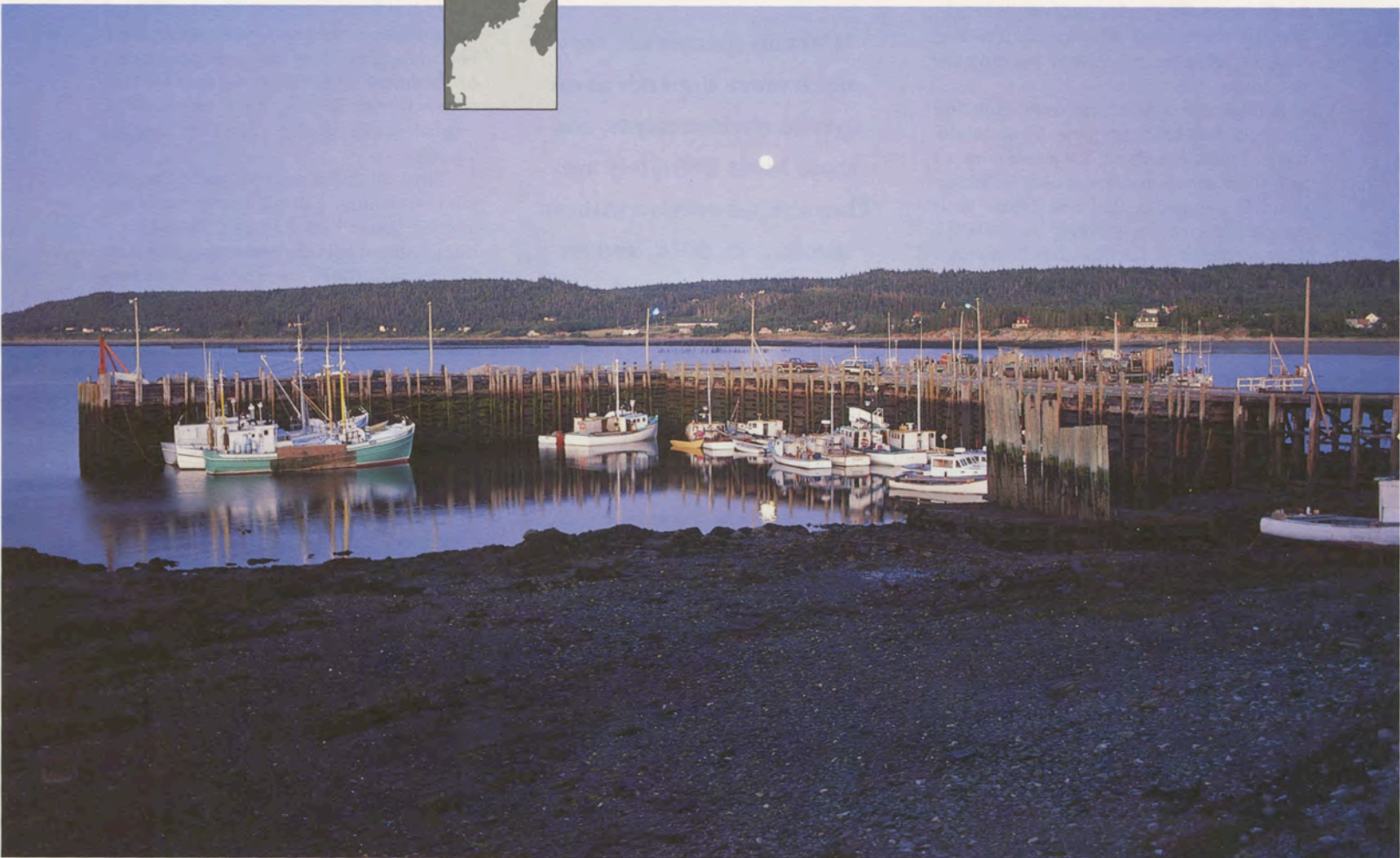
For 40 years, he drove his horse and wagon over the bottom of the sea, his movements mirroring the ebb and flow of his tidally ruled environment. His V-shaped, mile-and-a-half long brush weir was a giant fish basket woven of spruce boughs, saplings, and twine. It gathered passively, sometimes only enough flounder for table fare, other times enough herring and shad for salting, and occasionally a rare catch, such as a tuna, which Gerald cut into steaks for his neighbors. The weir was a permeable dam that was moderate in its catching power. And it was impermanent, as each winter ice carried the 1500 hand-driven weir stakes to sea. How unlike a tidal dam, I thought. It would be permanent, and immoderate both in scale and in its impact on the environment: disturbing clam beds, burying mud shrimp, and chopping shad to bits.

I can only hope that when the dream of tidal power undergoes its inevitable revival the lessons of the last 15 years are not forgotten: the true power of the tides is in their ability to do biological work. Said another way, tidal life is tidal power. It took this native born, Fundy boy—adrift among tide pools, marsh hay, and mud flats—three decades to express that simple thought.

Harry Thurston holds a degree in biology from Acadia University and has been a fulltime writer for the past 15 years. He is the author of many articles, two books of poetry, and two non-fiction books, Tidal Life, a Natural History of the Bay of Fundy and Atlantic Outposts. Nimbus Publishing of Halifax will release Against Darkness and Storm, Lighthouses of the Northeast, with photography by Wayne Barrett, in the spring of 1993.



A traditional gaspereau (alewife) stand on the Gaspereau River, Nova Scotia



The substantial government wharves in virtually every Canadian seaside town and village are a testament to Canada's heavy subsidy of its fishing industry.

Stephen Homer

TWO COUNTRIES, TWO SYSTEMS

Canada and the United States are different by design—and those differences affect how we manage the Gulf of Maine

DAVID D. PLATT

ONE OF A KIND," eulogized the Telegraph Journal in Saint John, New Brunswick, when billionaire K.C. Irving died last December 13. Considering the source (Irving owned the paper, along with all of the other English-language dailies in the province) the kind words were to be expected. And of course K.C. Irving *was* unique—anyone who could amass more than a billion dollars in his lifetime would have to be. But he was also a product of his time and place.

Like neighboring Nova Scotia and Prince Edward Island, New Brunswick was an agrarian society when K.C. Irving set out to make his fortune there in the 1920s. And not unlike the United States in the second half of the 19th century, it was a place where an ambitious young man could start by selling cars and gasoline, build up an oil business, and then branch out into timberlands, papermaking, publishing, shipping, broadcasting, refining, and just about every other activity where there was money to be made. By the time he died K.C. Irving was one of the world's richest men; it was said that one in 12 citizens of New Brunswick worked for him.

Could K.C. Irving have amassed the same fortune, in the same manner, had he lived in the United States during the same time period?

"In some ways it couldn't happen here," says Howard Cody, a political scientist specializing in Canadian affairs at the University of Maine at Orono. "Because of antitrust laws, the vertical integration of oil and the ownership of all the newspapers wouldn't have been allowed."

Twentieth century laws and taxes in the United States would not have been favorable to someone like K.C. Irving, in other words. Nor would American public opinion, which has tended to be suspicious of empire-builders on Irving's scale since the 19th century heyday of the robber barons.

But in Canada things were different. "He provided jobs, and a lot of New Brunswick people are grateful for that," says Cody. "It's the Depression mentality." The *Telegraph Journal* sounded the same theme in its farewell editorial: "He created thousands upon thousands of jobs. He jump-started and fueled the economy of New Brunswick as no one else had ever done. He made the wheels turn."

K.C. Irving is gone now, but the economy and society in which he turned the wheels remains characteristically Canadian—meaning it's quite distinct from the superpower next door.

DIFFERENT BY DESIGN

The differences and similarities between the United States and Canada are central to appreciating the Gulf of Maine, whose waters and fishing grounds lie in both countries. Canadians and Americans manage their resources, organize their governments, and undertake economic development in different ways. At the same time there is a long history of cooperation between the two countries, which share common histories, cultures, and problems, not to mention the longest undefended boundary in the world.

"When Canada began in 1867, the intention was to be as different as possible from the United States," explains Howard Cody. "Canadians see the checks and balances of the American system as a catastrophe." For their national government Canadians adopted the British system, concentrating power in a small cabinet. Canada's political history since that time has been largely a tug-of-war between the national government, based in Ottawa, and the various provinces.

The fisheries in the Gulf of Maine and on Georges Bank provide one of the clearest examples of the differences between the two countries. "In the United States we have operated virtually subsidy-free," points out economist Jim Wilson, a colleague of Cody's at the University of Maine. But in Canada, support and development of the fishing



New Brunswick tycoon K.C. Irving, listed by Forbes American Business Weekly as "the third richest non-monarch," could probably never have amassed his vast fortune had he lived on the U.S. side of the border.

When Canada began in 1867, the intention was to be as different as possible from the United States.

industry has been a matter of public policy, Wilson says. "Canada has viewed fishing as a principal employment source in the Maritimes, and historically, if not currently, they have put public money into it."

The taxpayers' money has taken various routes into Canadian fishermen's pockets: grants, low-interest loans, infrastructure such as breakwaters and piers, and boat subsidies. The fishing industry is vertically integrated: National Sea Products (which is one-third government owned) controls boats, processing, transportation, and marketing, and a government-sponsored unemployment scheme makes it possible for managers to shut down an entire fishery in the name of conservation, as it did recently in the case of the Newfoundland cod (see article page 37). Canadians have enforced a limited-entry rule for lobsters since 1968.

The emphasis on the U.S. side of the border, in contrast, is on the marketplace. Strategies to control effort by means of quotas, seasons, and mesh sizes have always been unpopular. "In the U.S. we do it through the fish auction in Portland," says Wilson. "It's very different."

Interestingly, Canada's intensive efforts at fisheries management have produced no better results than the more haphazard gambits in the United States. "Five years ago it looked as if Canadian quotas were working, but in the past two years there has been a turnaround," Wilson says. Groundfish stocks are in trouble in Canada, as they are in the United States. "The point is that fisheries are so variable and we are at such a loss to explain the sources of variability that it's difficult to say which system is better." The Canadian system of protecting fish stocks—largely through effort limitations and quotas but still based on a single-species theory of management—has been "no more successful and no less unsuccessful" than the system in the United States, he says.

Most of the Canadian subsidies have ended in recent years because of a mounting federal debt (Canadian deficit spending has been as spectacular as Washington's). But because subsidies are part of Canada's historic pattern, it's likely they will start up again when the government thinks it can afford them. Meanwhile, the Canadians have created an extensive fisheries-support bureaucracy which they continue to maintain. "It wouldn't fly in the U.S.," Wilson says.

Fishing is only one of many areas where the Canadian federal government has involved itself much more deeply than the U.S. government, in hopes of creating jobs. Not all of the schemes have worked, and the Maritime provinces are littered with the bones of well-intended projects that didn't produce the results their backers hoped they would.

For a time in the 1960s, for example, it was believed that the "heavy water" nuclear reactor would be the design of choice for power companies; the Canadian federal government invested in a plant to produce heavy water (which contains the heavy isotope of hydrogen called deuterium and acts as a moderator in certain kinds of nuclear reactions) in Canso, Nova Scotia. Technical problems doubled the cost and delayed completion; by the time the plant was done, utilities were opting for the "light water" design and there was a worldwide glut of heavy water. Today the Canso plant stands idle, a monument to a failed government effort to stimulate the Nova Scotia economy.

Also in the 1960s, politicians in Halifax eagerly signed on to a Florida promoter's plan to put people in the Digby area to work growing strawberries. The project did produce three crops, but three-quarters of a million dollars of provincial money disappeared into the promoter's pocket before officials uncovered an accounting scam (the promoter and his wife were both on the payroll, among other things) and called a halt.

Unlike heavy water, the strawberry scheme might actually have worked: the Annapolis Valley's climate is appropriate

Canada has encouraged fish-farming, one study concluded, while on the U.S. side of the border, governments have tended to put obstacles in the way.

Power to the Provinces?

Canadian provinces have nowhere near the clout of U.S. states," says Gerry Hill, a public information officer with New Brunswick's provincial government. "But the pendulum has begun to swing. Last year's referendum on the constitution was about the control of resources in many parts of Canada. The momentum is away from the center toward the provincial capitals." Americans who pay attention to such things will recall that the fall referendum failed despite support from the national government and big business—evidence that certain institutions no longer enjoy their traditional clout in Canada.

"The judiciary has begun to show more activism in recent years," notes Howard Cody, attributing this change to the Canadian "bill of rights"—The Charter of Rights and Freedoms—adopted 10 years ago. The more activist the court is, the more likely it is to give rights to provinces, Cody believes, pointing out that many cases since the 1800s have been turf battles over who's got the right to protect the environment, run day care, and perform other functions. As the pendulum swings, the provinces are likely to become more independent.

New Brunswick is a good example of the growth in provincial independence. It has forged ahead in areas that could, by the start of the 21st century, leave it better equipped to cope than its neighboring provinces. "The province leads Canada and much of the U.S. in integrating handicapped students into classrooms, and economic planning is quite advanced," Hill says.

for strawberries, and knowledgeable people advised the government at the time that a ready market for berries existed in Maine, but no one did anything about it. Students of Maine's failed effort to promote sugar beets will recognize similarities between the two projects.

Canadian investments in aquaculture have produced mixed results. High prices and generous subsidies created a gold-rush atmosphere in southern New Brunswick for a time. Projects were improperly sited on Grand Manan and at other spots along the coast, and authorities had to impose a licensing moratorium. Aquaculture survived, however, and today is a major contributor to the provincial economy.

"The development of the salmon farming industries of Maine and New Brunswick reflect dramatically different government approaches," concluded a

Cody feels the Charter has improved the position of the Canadian courts, which traditionally have been reluctant to tread on the rights of the national Parliament or its embodiment, the prime minister. But the change is slow: Courts are nowhere near as ready to strike down the rights of Parliament as they are in the U.S. "There's still the British notion that Parliament is supreme," Cody says.

Indeed, some things aren't changing much. The prestige of public sector employment (and the cost of maintaining the resulting bureaucracy) remains higher in Canada than it is in the United States, where citizens tend to be suspicious of government. Attending meetings in the states, Gerry Hill has been impressed by the sizes of Canadian delegations. "There are enormous bureaucracies in relation to the size of the populations of provinces, he says. "I saw it in acid rain discussions—the New Brunswick delegation was 10 people, with significant budgets under their control, while the delegation from the U.S. all had to travel in the same van."

Canadians also vote more than people do in the U.S. Turnout is usually around 75 percent (comparable with Maine's turnout, which often sets national records). Political activism is quite limited, perhaps because of the tendency to accept the government's right to govern. "People can't stop a nuclear power plant," Howard Cody says. "Only the Legislature can."

As for K.C. Irving, the quintessential New Brunswicker, it's said he "never lost an election" in the provincial Legislature, despite the fact he never served in it and never ran for public office.

—David D. Platt

1992 study by the University of Maine School of Law that pointed to New Brunswick's ability to double its production each year between 1979 and 1991. Canada has encouraged fish-farming, the study concluded, while on the U.S. side of the border, governments have tended to put obstacles in the way.

The would-be Maine fish farmer is put through "a maze of state, local and federal application procedures, site assessments, benthic and water quality monitoring, health and disease testing, and public hearings," the law school study found.

The regulatory labyrinth for aquaculture points up another contrast between the two countries: environmental laws. U.S. states and the federal government operate a variety of licensing programs under the Coastal Zone Management Act, the Clean Water Act, and laws regulating development in wetlands and protected estuaries. The effects of these programs go far beyond aquaculture.

The New England states discourage or forbid overboard discharges of domestic sewage and sometimes even septic tanks where there's a public sewer (Maine "grandfathers" many existing discharges), while the same sewage in Nova Scotia and New Brunswick is largely unregulated.

U.S. federal law protects all marine mammals, while Canadian federal law protects only whales. Coastal zone management approaches are different, as are the rules for leasing submerged lands. Commented David VanderZwaag of the Oceans Research Institute of Canada in Halifax, co-author of a 1992 comparison of the two countries' environmental laws: "In the Gulf of Maine, not unlike other regions of the world, each jurisdiction has gone its own way."

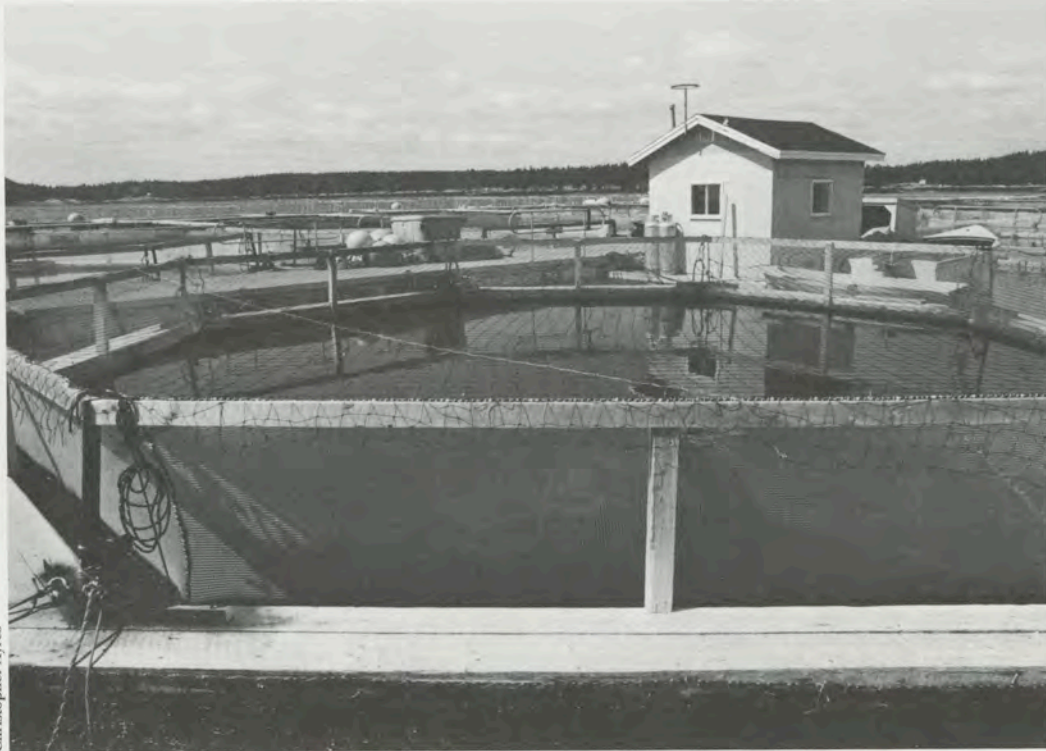
COOPERATION

It would be misleading to suggest that the differences between the United States and Canada are a barrier to international cooperation. Quite the opposite is true: The two countries, and particularly New England and the Maritime Provinces, have a long history of connections and cooperation. Some of the links are economic: Fishermen and fish processors on both sides of the border have operated for years in an international market; hundreds of Canadians shop at malls in Bangor and Portland; Maine consumers buy a substantial amount of fuel from the Irving companies. Some links are cultural: Maine's public television stations have thousands of viewers, via cable systems, in New Brunswick and Nova Scotia. And some are political: Americans and Canadians cooperate in the management of the Roosevelt-Campobello International Park and the International Joint Commission that oversees the St. Croix River and the rest of the U.S.-Canadian border.

One of the most ambitious cooperative projects was established three years ago by the governors and premiers of the three U.S. states and two Canadian provinces that border on the Gulf of Maine. Forming the Gulf of Maine Council on the Marine Environment, the political leaders set out to raise the public's consciousness about the Gulf and improve the management of its resources. By tacit agreement the council doesn't concern itself with fisheries, which tend to be controversial, but it has set up water-quality and air-quality monitoring projects, funded various research projects, studied the differences between state and provincial laws, moved to reduce marine debris, and designed an advanced information-sharing network.

The international setting sometimes made managing the program difficult, recalls Paul Monti of the New Brunswick Department of the Environment in Fredericton. "We had a lot of paper going back and forth, and getting anything across the border—a slide show, a box of reports—was a factor we had to consider," he said. As head of the program "secretariat" for fiscal 1992 (administrative responsibilities move to a different jurisdiction each year), Monti had to contend with exchange rates, varying budget years and accounting systems, and the "nebulous" role of the Canadian federal government, which has no formal relationship with Nova Scotia and New Brunswick where coastal programs were concerned. (The U.S. government funds coastal programs on its side of the border, meaning its role in the Gulf of Maine program is somewhat better defined.) Overall, Monti said, administering the program wasn't particularly difficult. Exchange rates remained relatively constant during his watch, and "the major challenge was keeping everybody up to the appropriate level of understanding."

Despite the long and peaceful border between the United States and Canada, relations between the two countries at the federal level haven't always been easy. According to Howard Cody, it often boils down to personalities: "In general, the U.S. president and the Canadian prime minister develop a personal relationship, and often matters have been dealt with at that level." Unfortunately, the personal relationship isn't always good, and that can color the international relationship. President Kennedy got along better with Lester Pearson than he did with John Deifenbaker, for example, while Pearson didn't get along with Lyndon Johnson. Brian Mulroney got along well with Ronald Reagan and George Bush, a state of affairs that contributed to the Free Trade Agreement and probably to the negotiations to reduce the international traffic in acid rain. "Presidents and prime ministers can get things done," says Cody,



Christopher Ayres

Canadian salmon aquaculture, Passamaquoddy Bay

The emphasis on the U.S. side of the border is on the marketplace. Strategies to control effort by means of quotas, seasons, and mesh sizes have always been unpopular.

admitting that agreements reached at the border may fall on their face when taken back home. A fisheries treaty negotiated by Jimmy Carter "fell apart" between 1979 and 1981, says Jim Wilson, because of opposition from New England senators. An effort to standardize the lobster gauge, likewise, ran into trouble despite support in high places.

UPSIDE DOWN

A U.S. Marine color guard made headlines last fall when it marched into the Atlanta Braves' stadium for Game Two of the World Series with Toronto—carrying the Canadian flag upside down. The incident (baseball officials later apologized) said something fundamental about the relationship between the United States and Canada: in many ways it's a one-way street.

Americans know very little about Canada. Few are aware that the huge country next door to them is willing to go

to great lengths to create jobs and foster development. Few realize how centralized the Canadian government is, how dominated it is by its legislative branch, and how its political traditions differ from those in the United States. Most Americans aren't aware of the substantial cooperation that occurs between the two countries in spite of these differences—cooperation between law enforcement agencies and between scientists, cooperation among the governments that constitute the Gulf of Maine Council. They would be surprised to learn that a single family (the Irvings) could, in a single generation, come to dominate a Canadian province and amass wealth on an unimaginable scale.

Most Americans wouldn't have noticed the Canadian flag flying upside down at the World Series if it hadn't been pointed out to them. Canadians noticed, of course, but they reacted tolerantly to the Marines' slip-up—to them such displays are nothing new. After all, they have been inundated by U.S. media and pop culture (and Americans' tendency not to know much about Canada) for generations. "What's the difference between an American and a Canadian?" a current north-of-the-border joke goes— "The American thinks there's no difference."

In spite of their differences—and in full respect for them—the peoples of these two countries share some remarkable resources, most notably the Gulf of Maine. International cooperation there has already begun. In the future, efforts to increase understanding in what is truly a "bioregion" will be critical to its economic, social, and environmental survival.





IN COD WE TRUSTED



DAVID CONOVER

When a problem is so big that everybody can see it, it's almost too late to do anything about it," comments Lloyd Dickie in his article earlier in this Island Journal. Last summer in Newfoundland the inconceivable happened—the government moved in forcefully to close down a dying fishery, throwing thousands of Newfoundlanders out of work and effectively destroying not only a livelihood, but a way of life. Could anything have been done to prevent it? Could it happen elsewhere?

ON JULY 3, 1992, in a back room at the Radisson Hotel in St. John's Newfoundland, Canadian fishery minister John Crosbie announced to an assembled group of press that the Grand Banks was closed to the taking of northern codfish, known here simply as "fish." A 500-year-old fishery, by far the largest in the Northwest Atlantic, had collapsed and was now commercially extinct. Twenty thousand Newfoundland fishermen and plant workers were out of work. The Grand Banks had been fished out.

Here in New England the news was but a whisper. Our cod fishery is already a receding memory. Once the codfish were as plentiful as on the Grand Banks, but they were fished out 30 years ago. The cod have never come back. No one knows if they ever will.

Barred from the press room that night, a group of concerned fishermen watched the proceedings on a large-screen video in an adjacent room. Included in this group were Sam Lee, an inshore fisherman with whom I had spent a good deal of time that previous week while exploring the fisheries for a PBS Nova documentary, and Cabot Martin, President of the Newfoundland Inshore Fishermen's Association and a champion of the fishermen's cause. The fishermen were angry, frustrated, and depressed. The news was expected, but the words cut cruelly nonetheless. Sam rushed out of the room and began to pound on the door of the press conference room to "have a word with the minister." His pounding echoed throughout the hotel and was felt in the bones of all who heard, or who watched on TV. I saw Cabot reluctantly stand between Sam and the door, hold up his hand, and say, "Stop, boy, stop...It's doing no good."

For a New Englander like myself, the scene witnessed at the Radisson that night stirred something far down inside me, a memory of a promise and a trust inherited from a time long, long ago—and now almost entirely betrayed. “*How has it come to pass that we would put at risk the mighty cod—our past, our future, our essence?*” That is Cabot Martin’s question, and he asks it unflinchingly of all who will listen: himself, Sam Lee, the Newfoundland government, its fisheries scientists. His struggle to find a response ripples far beyond Newfoundland’s inland shores, raising questions for our Maine islands, too, with the fish that still remain.

Cabot Martin is a zealot for cod. Son of a Protestant minister, born and raised in a Newfoundland outpost, he became a lawyer and eventually a United Nations delegate during the framing of the Law of the Sea treaty in the mid 1970s. His mind is sharp and wide-ranging as evidenced in his weekly newspaper column and his recent soulful book, *No Fish & Our Lives*. Books about the fishery from every angle cram his home: the history, art, science and politics of fish. During the season, the phone rings off the hook as fishermen friends call in with the latest news. And as for historical perspective, Cabot’s stories of the great days of cod paint a wrenching picture of what has been lost: not just a livelihood, but a cultural identity.

In the beginning, there was the fish. Cabot Martin’s forbear John Cabot may have been looking for the northern spice route in 1497, but it was his fish stories that encouraged most of the trips that followed. And did the Europeans go for that fish! By 1504 the outer Grand Banks were being fished by the French and the Portuguese who had plenty of salt and were able to cure their enormous catch at sea and carry it back “wet” to market. Records show that on one day in 1542, sixty vessels left Rouen, France for Newfoundland. Soon afterwards the English arrived, fishing closer to shore. One account, dating from 1617, reports that there were “cods so thicke by the shoare that we nearlie have been able to row through them. I have killed of them with a pike.” A salt-poor people, the English were forced to build fragile summer drying racks on the beach to prepare the rich haul for the return trip.

Eventually, summer drying stations became year-round communities. Word of the fabulous fishing grounds and the land beyond was also attracting other kinds of settlers: Disaffected religious pilgrims sailed farther south, landing near Cape Cod, in Plymouth. In God—and cod—they trusted. As the centuries passed, communities diversified and spread inland, eventually becoming the communities and cities of New England and Nova Scotia that we know today. But back in Newfoundland, the close tie to the sea persisted; almost as if, having survived the long sea passage, the settlers were unwilling to fully step off their boats. With so many fish, there was no need to...

Now Sam Lee’s boat drifts uselessly in the twilight years of a once-great fishery that only knew a bountiful harvest. The story of what led up to this point is complex within its specific Canadian context, but the highlights are disconcertingly simple and familiar. In the 1970s and 80s the fishing was very good. Too good to last. Advances in technology and in the number of boats in the offshore fishery had stripped the outer banks of cod, where they congregate to spawn. In Sam’s own inshore fishery, advances in fish-finding equipment and in the efficiency of traps set took what was left over when the fish came in to feed. No one put on the brakes: not the fishermen, not the government and not the fisheries scientists. The fishermen wanted fish. The government wanted short-term economic growth. Fishery science was in its infancy and unable to say forcefully “we don’t know.” A fishery that had lasted 18 generations disappeared in one.

Cabot Martin acknowledges that the waters that John Cabot discovered in 1497 are gone, long gone. He has tried to chart new directions to save what may remain of the fishermen’s way of life. And even on the rocky island of Newfoundland, new grass can grow around the sternest of tombstone, and there is hope of learning from mistakes. Sam Lee, for example, has learned what a new direction for living with the ocean means.

In former days, a Newfoundland inshore fisherman like Sam set his nets a few miles from his home and tended them day after day, year after year, with a small

Cabot Martin on fisheries science

How have we unknowingly arrived so close to the edge of darkness?

Sure, “the trawlers did it”; sure, they did the physical damage; sure, they plundered the spawning grounds; sure, they pulled the trigger. But who gave them the gun?

What a terrible witch’s brew! Science—mysterious and arrogant; bureaucracy—faceless and unaccountable; and politics—hesitant and expedient. This is the black heart of the problem, a brew that allows, almost guarantees, a drift and slide down the slippery slope to commercial extinction.

Fisheries scientists have been set up by the politicians as the purveyors of some special truth; the scientists themselves haven’t helped by going along with the con.

Caught up in the same web of self-interest and petty internal politics as are most of us, hobbled by an imperfect art, and hounded by politicians and desperate fishermen for firm answers, they have made a strategic but fatal retreat by crawling inside their computer models.

boat. His traditional fishing grounds, or "berths," inherited from his father, had telling names like "the Minister," "the Front Door," and "the Pulpit." His brother and a friend helped him haul. His knowledge is mediated by stories of fear, hope, disaster and bounty; knowledge born from being in one place for a very long time, trying to catch as many fish as possible. Perhaps the deepest-set characteristic of this knowledge has been trust: trust that there will always be more fish, and that the vastness of resource will never be diminished to the point of not recovering. Words and ideas like *environment* have been foreign thinking for Sam: he lives mainly with the *rock*, the *sea*, and until recently, the *fish*. A visitor from the south like myself quickly senses his perspective on the *environment*: an idea born mainly from an urban and suburban mindset where any daily tie to the land and sea has been broken.

With the northern codfish gone, however, so is the trust. The resulting shock has forced Newfoundland fishermen to see things differently and form an alliance with an unlikely party: the environmental community. This was not a small leap for both these groups, despite what may appear to be common goals. Many fishermen resented the intrusions of the save-the-seal crowd in the 1980s. The environmentalists were seen as publicists with an outside agenda unconnected to the traditions and integrity of Newfoundland life. They never seemed to fully grasp the wonder and importance of fish and fishermen as integral parts of

the ecosystem, focusing instead on the icons of warm, fuzzy mammals and sea birds. A gap exists, Cabot often adds, because the environmentalists are not themselves directly tied to the sea, the rock, the fish.

Yet, by being outsiders, environmentalists could also see things in a larger world context: wide-term and long-term. Cabot Martin recognized this and, after holding out the olive branch to Farley Mowat, Newfoundland's well-known environmental writer, to Greenpeace, and to others, he worked hard to bring them into the fishermen's world. He has invited environmentalists to meetings with fishermen and urged fishermen to expand their understanding of the whole ecosystem, and to adopt a longer view. Many, like Sam Lee, are coming to see sense in this view.

The result of this is a promise of a new environmental fishing community in Newfoundland. At present it is only a promise, however—a whisper at the edge meeting with many skeptics and nay-sayers. Whether that promise actually becomes a forward-thinking alliance is now on hold, awaiting an uncharted future when maybe, just maybe, cod and the fishermen return to the Grand Banks.

Member of a well-known Maine sailing family, David Conover is a documentary filmmaker in Cambridge, Massachusetts. Last summer he was in Newfoundland with sea kayaker and naturalist Richard Wheeler (see p. 42) and partner Christopher Knight filming "Journey to Extinction" for PBS Nova. The film will air in the fall of 1993.

Computer-based mathematical models are still very new; hopefully some day they will improve. But, for now, they can no longer rule the roost; at least equal weight must be given to the knowledge of fishermen.

The great Russian fisheries scientist, Nikolsky, in the ten years preceding his death in 1977, kept saying that fisheries science was relying too much on the computer models that he himself had pioneered, and that too many fisheries scientists had forgotten their basic ecology and biology and were losing touch.

So true then; more true today.

If we give fisheries scientists budgetary independence and freedom from political interference and more money, people and ship time, and if we can get them to listen to fishermen with the respect they deserve, we may have a chance.

What we need is practicality, openness, and accountability.

What really went on in DFO's (Department of Fisheries and Oceans) cloistered halls in 1986 when at least some DFO scientists were warning their superiors of a serious overfishing problem with the northern cod? Why were they ignored? Why were three precious years—three years in which overfishing continued

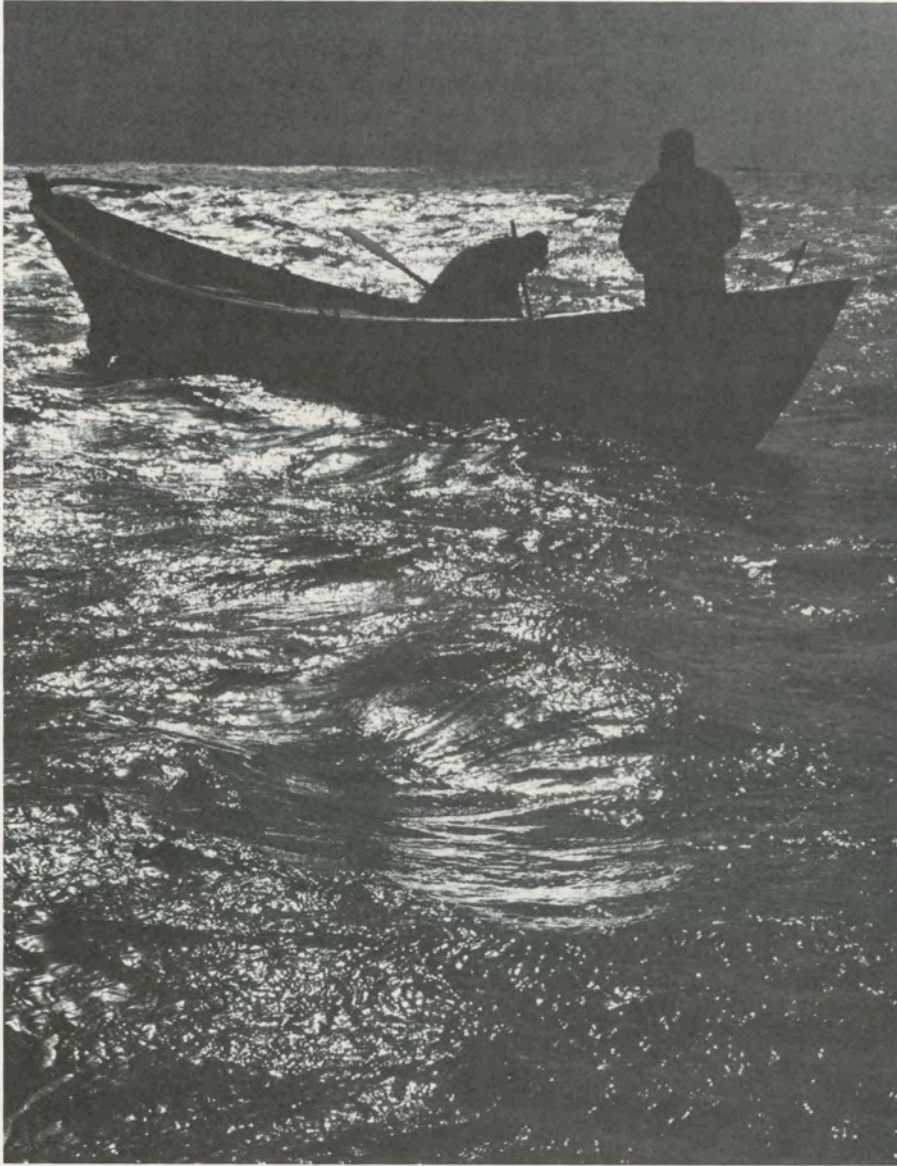
unabated—why were they wasted? And these the years of inaction that will guarantee the stocks' demise?

We need to know how and why DFO's wildly incorrect conclusions were elevated to gospel and sold to fishermen and the public. This sort of question can only be effectively asked and answered by a formal public inquiry.

Our unquestioning acceptance of authority has taught us not to question scientists; to worry more about what the minister might do on our next license application than about the stocks; to accept that vital decisions should be taken behind closed doors.

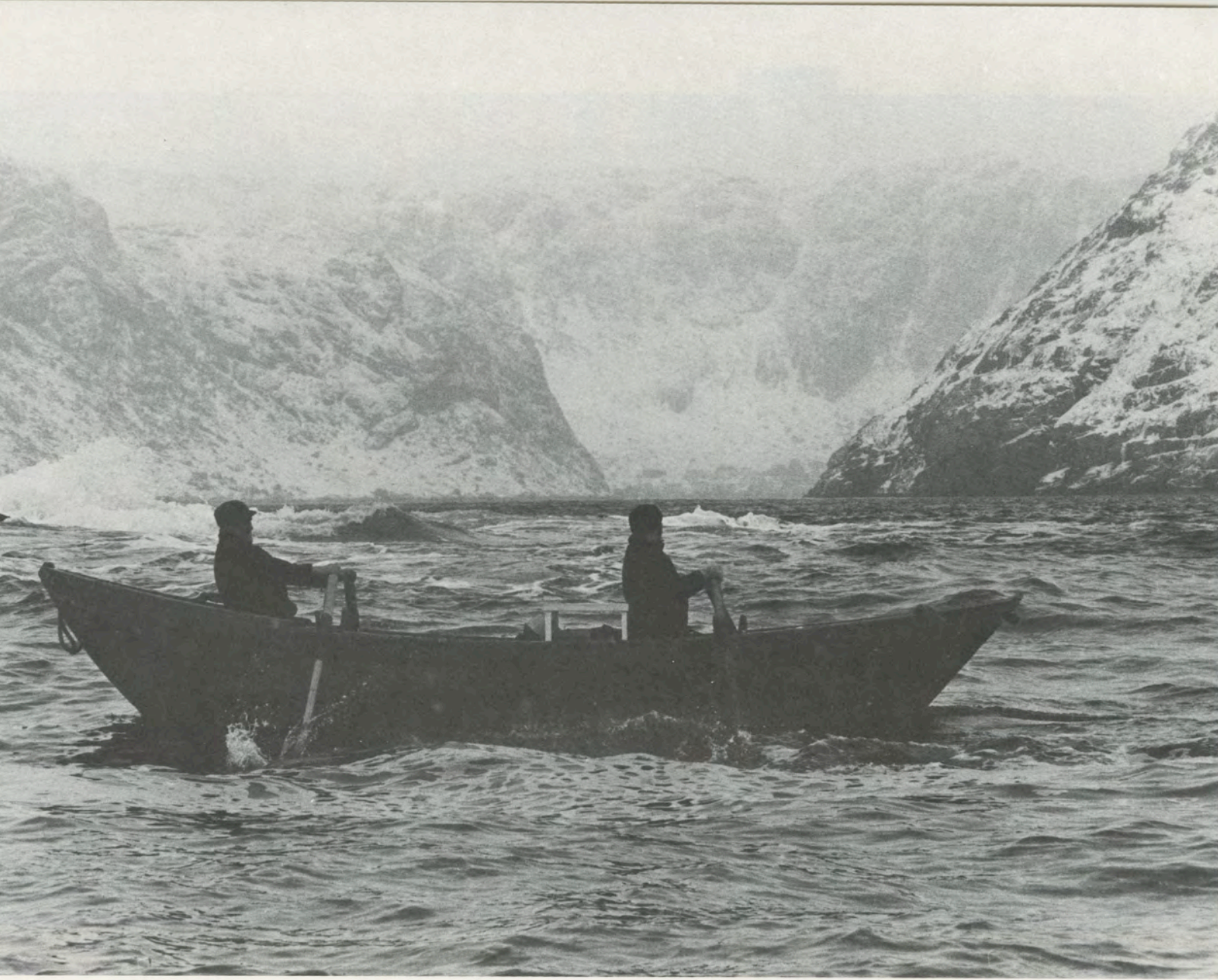
We will pay a terrible price for our moral cowardice.

A lawyer and journalist, Newfoundland native Cabot Martin has served as president of the Newfoundland Inshore Fisheries Association, which has been in the forefront of the fight to save the northern cod stocks. This excerpt was taken from an essay entitled "The Witch's Brew: Science, Politics and Bureaucracy," in a collection of Martin's writings published as No Fish & Our Lives: Some Survival Notes for Newfoundland in 1992 by Creative Publishers, St. John's, Newfoundland (for review, see page 94).



John de Visser's
haunting photographs of
Newfoundland codfishing
in the 1960s come from
*This Rock Within the Sea:
A Heritage Lost* by Farley
Mowat and John de Visser
(Little Brown, 1968).







David Conover

TELL THEM!

*As the Great Auk goes,
so goes the ocean....*

RICHARD C. WHEELER

Educator Dick Wheeler left Funk Island, Newfoundland, on July 14, 1991, for a four-month trip by kayak and ferry that would take him along the coasts of Nova Scotia, New Brunswick, Maine, New Hampshire, and Massachusetts—ending up in Buzzards Bay on November 16. He passed through the Gulf of Maine in October. He was accompanied at times by a film crew producing a program for the Public Broadcasting Service (PBS) that will focus on Wheeler himself, the region's wildlife, and the decline of the groundfishery from the perspective of the fishing communities that depend on it. Wheeler's trip was financed with the help of the New England Aquarium in Boston.

AS A TEACHER/naturalist who wanted to turn the tragic story of the extinct, flightless great auk into a metaphor for our relationship with the ocean, I have to be pleased with the education outcomes of my journey by kayak across the Gulf of Maine: Hundreds of kids from Nova Scotia to the Fiji Islands followed my trek through curriculum projects; thousands kept track through educational television programs; a curriculum kit that will outlive me is "in the works," and a Nova documentary film of the trip will deliver a strong environmental message to millions.

I should be elated, but I'm not; I'm depressed, but why? I think I'm just beginning to understand the answer to this question.

It was natural, I was told, to have a kind of postpartum letdown after completing a project of such intensity: two years of research, fund raising, planning, and training, followed by four months of nearly daily double and triple marathons as I paddled my kayak from Newfoundland to Cape Cod. But it's been more than a year since I beached my little boat in Buzzards Bay on a site where Professor Luis Agassiz

of Harvard found the bones of Great Auks a hundred years ago; more than a year since I shaved off a beard that made me look like Santa Claus making his rounds in a kayak. More than a year it's been, and I'm still "down" emotionally. I have had to make myself realize that the condition is trip-caused and perhaps permanent.

The feeling I'm talking about is that mixture of sadness and helplessness and anger one feels when a loved one is destroying herself or himself with alcohol or drugs. You try to help, but the focus of your concern either brushes you off or says, "Thanks—I'll do something about it when it gets to be a problem."

I am grieving because my experience has burdened me with two unshakable feelings: one, that we are killing the ocean, and two, that we are in a state of denial about it, both individual denial and international denial.

I started out on my Great Auk voyage with a concern for specific species. I felt that if I could help people become more aware of the continuing threats to the true sea birds, the surviving relatives of the Great Auk, I would have done something worthwhile.

What I hadn't considered before I set out was that fish could become extinct, too—or that the ocean itself could die. I knew that fish stocks could be depleted and that there had been a great decline in the groundfish populations in the Gulf of Maine, but I always thought that fishing pressures would slack off and that the populations would come back. The notion that stocks might not recover from a drastic decline even *without* fishing pressure had not occurred to me. I had seen millions of eggs in the belly of one cod; surely such fecundity could be capable of prevailing over human predation. We would always leave a few, and those few would become many.

But I was dead wrong, and I had no sooner started my paddle-journey than I could feel the Great Auk metaphor expanding to embrace the commercial extinction of fish. It was the fishermen of Newfoundland who drove this point home. They, the descendants of the destroyers of the Great Auk, understood my metaphor better than I did, for they saw themselves as participants in a modern repeat of the tragedy of the Great Auk.

"We fished out the haddock in 1963, and they haven't come back," they told me in village after village. "Then we fished out the herring and the turbot [flatfish] and they haven't come back. Now we're fishing out the cod, and what makes them think that the cod will come back?"

"Them" are the fisheries scientists and policy makers of Canada and the United States who have done such a monumental job of mismanaging one of the greatest resources of the world: the fishing banks of the northwestern Atlantic.

When I came ashore at the end of each day it would often be to a settlement inhabited by people whose fishing traditions extended back for hundreds of years. Unlettered but wise, they made me see the fish—and their mother, the ocean—as I had never before considered them: as animate creatures in peril.

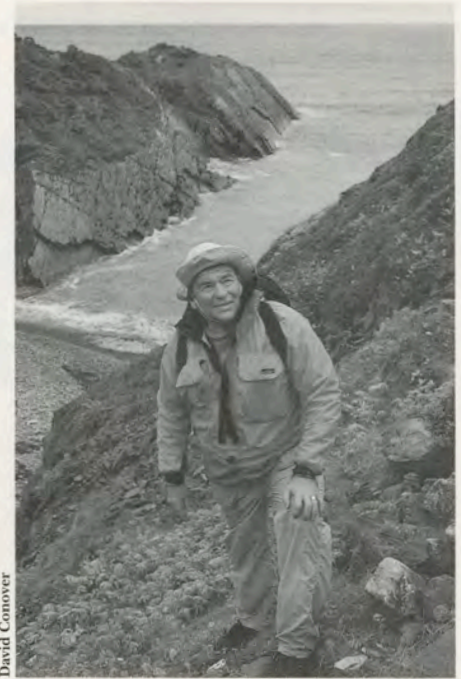
"Why are they letting us catch the babies?" was the tragic chorus of fishermen unloading the juvenile cod that would soon become the "native scrod" of our New England markets. "Why are they letting us use such a small mesh? Soon there will be no more fish... They blame it on the water temperature, but it's those foreign draggers, I tell you. They've let the foreign draggers catch all the offshore fish, and soon they'll all be gone from the inshore, too."

The intuitive understanding of the Newfoundland fishermen made them more accurate predictors than the scientists of the total collapse that was about to take place, but their denial of their own involvement contributes to the dilemma, for the inshore fisherman of Newfoundland is one of the deadliest ocean predators on the planet. Newfoundlanders are some of the world's most generous and hospitable people, but they are frighteningly good at their profession of killing fish.

As the summer wore on, I became more and more convinced that we are locked as if on iron rails toward the destruction of that abundance of fish that lured the first Europeans to North America, and the more I thought about the implications, the more somber I became. When I was the guest of fishing families in outport villages in Newfoundland, I saw first-hand the economic and social devastation caused by the demise of the fish that held the culture together.

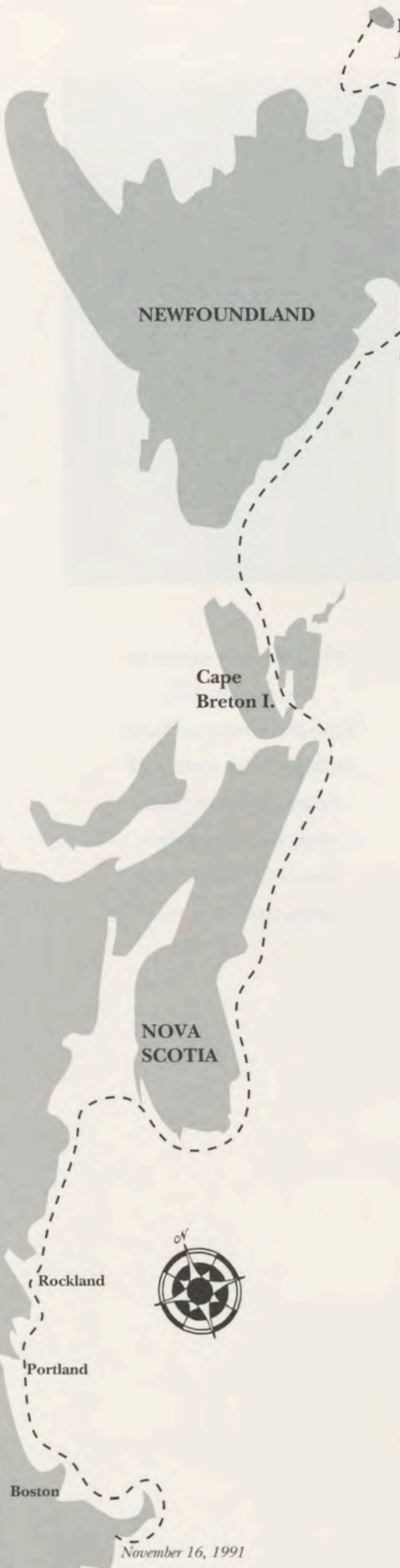
Then, when I got back in my kayak and continued my "migration," I would slip into that Zen-like state that comes after hours and hours of paddling alone. In my trance, I found myself pondering the fish crisis from a larger perspective. "What does it mean," I kept asking, "What does it mean to you and to me and to everyone else on the planet if we effectively kill the ocean?" We are doing it one species at a time. The problem is far larger than the collapse of a 400-year-old folk culture: What does it mean to the survival of humans when we have stripped the ocean of its ability to replace what we have taken away? If the ocean dies, are we next?

When I paddled into Maine in mid-October it was like coming out of a time warp. Newfoundland had always seemed like yesterday; now Maine seemed like tomorrow. It was disorienting; I had come out of a culture that was about to catch its last cod into one that had already done it, and—not to worry—had shifted into the fishery of the future: aquaculture.



David Conover

What does it mean to the survival of humans when we have stripped the ocean of its ability to replace what we have taken away? If the ocean dies, are we next?



Funk Island

July 14, 1991

If keeping a coastal culture alive is the challenge, then perhaps aquaculture is one solution. I had to be impressed with those strong and healthy salmon I saw in acres of pens at Eastport and Cross Island. The output is impressive—minuscule in relation to offshore tonnage, but impressive just the same. The quality of the product is good, and the ventures have meant year-round employment for hundreds of people who might otherwise be putting pressure on the wild stocks.

But I have some serious reservations about aquaculture, both practical and philosophical.

The practical concerns are the legal, environmental, and aesthetic pressures that could become insurmountable if aquaculture were to assume the massive scale of the agri-businesses of our heartland—and aquaculture will never be the answer to our world needs unless it does reach those massive proportions. The farming analogy breaks down when one considers that the fish in those pens depend upon wild fish. It takes two pounds of salmon chow to put one pound on a salmon. That sounds good, and it would be if you could make salmon chow out of old newspapers. But it takes five pounds of wild herring or some other fish that humans can eat in order to make one pound of salmon chow. All of a sudden you have an exotic end-product that is very wasteful of a wholesome human food source.

And from a philosophical standpoint I have trouble with the arrogant or naive—take your choice—notion that human technology can fix anything that humans have broken, and I have even more trouble with the notion that we can improve on what happens in a healthy ocean. When I hear people talk about grand schemes involving pens on the open ocean, I know I'm talking with someone from Missouri or one of those other square states on the middle of the country. People who believe that aquaculture can feed us all make it easier to rationalize and justify the taking of the wild fish that are left. So aquaculture intrigues me, and more ventures should be encouraged, but please don't tell me that aquaculture will take the place of a dead ocean!

The apparent health of Maine's lobster industry impressed me but did nothing to cheer me regarding the health of the Gulf of Maine.

The success of lobster fisheries management is almost—but not quite—a model for the fin-fisheries. Here are fishermen who saw early on the relationship between protecting the egg-bearers and the continued health of the species. Because juveniles have been protected; because the method of capture has continued to be a

passive one; and because lobstermen have begun to see the wisdom of limits on numbers of traps, fishing days, and fishermen, the fishery continues to hold its own.

Two interesting phenomena have positive effects on the lobster fishery. One is that lobstermen are like farmers; they provide an artificial and supplemental food source for the little ones for whom the lobster trap, with its fresh supply of bait every two or three days, is their feeding station until they wander in for the last time in the new suit of clothes that makes them legal.

The other phenomenon is impossible to prove, but it makes sense: "When I was a boy," the fisherman began, "The cod were big, and in the belly of a big cod, you'd always find small lobsters—lots of them. There are no more big cod, so more little lobsters can get to be big lobsters." Makes sense to me.

But perhaps the message of the lobster fishery is that scavenger species are not only better able to resist our predation; they thrive on us. If seagulls, as some contend, are rats with feathers, lobsters are cockroaches that can hold their breath. We must not allow ourselves to jump from the apparent health of the lobster fishery to the assumption that this means the ocean is healthy. Lobsters will thrive in water that causes cancer on bottom fish, and this ability disqualifies them as indicators of healthy water.

Our mistake with the groundfish may be that we treated them as if they were a scavenger species that would persist, just like rats and gulls and roaches and lobsters. We failed to understand and respect the fragility of their reproductive life cycles, and not only did we not worry about the health of their bottom habitat, we have plowed it over countless times—and we're still doing it!

And, as with the Great Auk, which once existed in staggeringly large numbers, and as with the buffalo and the passenger pigeon, we felt that no matter how many we took there would always be more. "It's their job to adapt to us," we said.

Despite a powerful new storehouse of visual images and some close friendships with coastal people which I will treasure for the rest of my life, the overriding emotional effect of my experience is dejection. I can understand how Kurt Vonnegut must have felt when he delivered his shocking, nihilistic, one-sentence graduation speech at Radcliffe in 1970: "The world is not good now, and it is never going to get any better."

I don't like to hear myself say it, but I don't think that the Gulf of Maine is going to get any better either. When I consider the enormous power of demonstrated human need in combination with human greed, I see us failing to take the medicine that would lead to a remission and possibly a cure: a moratorium of no less than 10 years on all commercial

November 16, 1991

groundfishing followed by a permanent ban on all forms of fishing that injure or capture juveniles, and accompanied by strict limits on fishing pressures and annual moratoriums during the spawning seasons.

You think this is extreme and it is. But given the state of the ground fisheries of the western North Atlantic, any talk of creating a sustainable fishery without a long moratorium followed by totally different fishing policies and practices is like talking about sustainable yields from the American bison as you are shooting them out the window of a train that is crossing the Great Plains.

My heart aches for the Newfoundlander whose culture has collapsed, and I feel sad that young people on our own coast might not be able to continue a family tradition. But my greatest ache is for the ocean and everything that lives in it, on it or over it. I ache because I am convinced that we are not going to change our destructive ways until everything has gone into irreversible decline.

"But," you argue, "People *are* changing, they *are* changing their attitudes toward waste and water quality and recycling and the importance of diversity."

I wish I could draw hope from these changes, but I fear that we still don't "get it," and that our gentler relationship with what we call the environment will simply make it possible to justify a growing population and more productivity. When we stop measuring our nation's health with the monthly "housing starts," I'll cheer up, I promise, but until that happens it is a certainty that more and more pressure from an expanding population will be put on fewer and fewer fish until there are no more fish to catch.

The mindset that led to the extinction of the Great Auk, the Plains Buffalo, and the passenger pigeon is alive and well: "God put these creatures here for us." This mindset forms the basis for the policies of our major institutions of church and state. This mindset justifies the taking of "God's bounty," and it also thwarts attempts to curtail what amounts to pillage. Our relationship with our planet is wrong, and it is wrong because we have been wrongly taught and led.

More than anything else, the "Great Auk Voyage" changed the way I relate to the planet. My original plan was to do the trip, develop some educational programs, and walk away; but now I feel compelled to spend the rest of my life as a working educator/naturalist to assist those who are trying to make people understand the enormity of the crisis in the northwest Atlantic, which includes the Gulf of Maine. The migration route of the Great Auk—Newfoundland to Cape Cod—embraces a living body as important as the rainforests of Brazil, but which has been subjected to more prolonged and brutal stress. On the surface

we think we see the same ocean John Cabot saw 400 years ago. But it's not the same. I have seen the destruction, but I have seen it in ways that have no credibility with scientists and policymakers. I have seen the destruction through the eyes of men and women who have a collective wisdom regarding the ocean that surpasses the wisdom in the clinical statistics of fisheries scientists in the employ of institutions of commerce. I joke about being led on my journey

by the spirit of the Great Auk, but I only joke so as not to cause alarm. In fact, I did not have to push myself to finish my coastal trek; all I did was allow myself to be led, and as a result of that "letting go," I was let in on understandings. Because I earned the respect of Newfoundlanders, they often asked me to carry their messages: "Tell them," they would plead, "Tell them that soon there will be no fishery left."

On the bow of my kayak was a Great Auk figurehead: "Little Aukie" was the name fishermen gave it, and since they talked to "Little Aukie," it was easy for me to do it too, when I had no one else to talk to. The sea birds seemed to be communicating with "Little Aukie" as well: guillemots squeaked in circles around "Little Aukie" and me all day long, and razorbills swam alongside the figurehead they seemed to recognize as their long departed (and much larger) look-alike.

It was an easy segue from this spirit-fantasy-Zen stuff into imagining that I could hear the ocean itself talk. I would have predicted the angry, powerful voice of an Old Testament God. I heard instead a beautiful but tired voice that repeated a chorus not unlike the one I had heard from the fishermen: "Tell them," the ocean pleaded, "Tell them that I can't do it anymore; tell them that I can't cleanse myself as fast as you foul me; tell them I can no longer replace what you tear from my womb. Tell them."

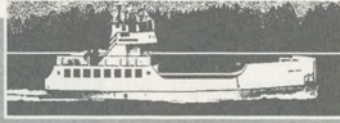
Sometimes I am frustrated to the edge of tears at my inability to make people aware of what we have done. I probably hoped that my trip would be like a kinetic sculpture, saying it all in a way more powerful than photographic images or the written word.

But in our culture the next step is necessary. The person who does the sculpture has to be able to describe in words what the sculpture means. I am indebted to the Island Institute for inviting me to make this attempt, but I fear that my experience is one that can be summed up only by saying, "You had to be there."



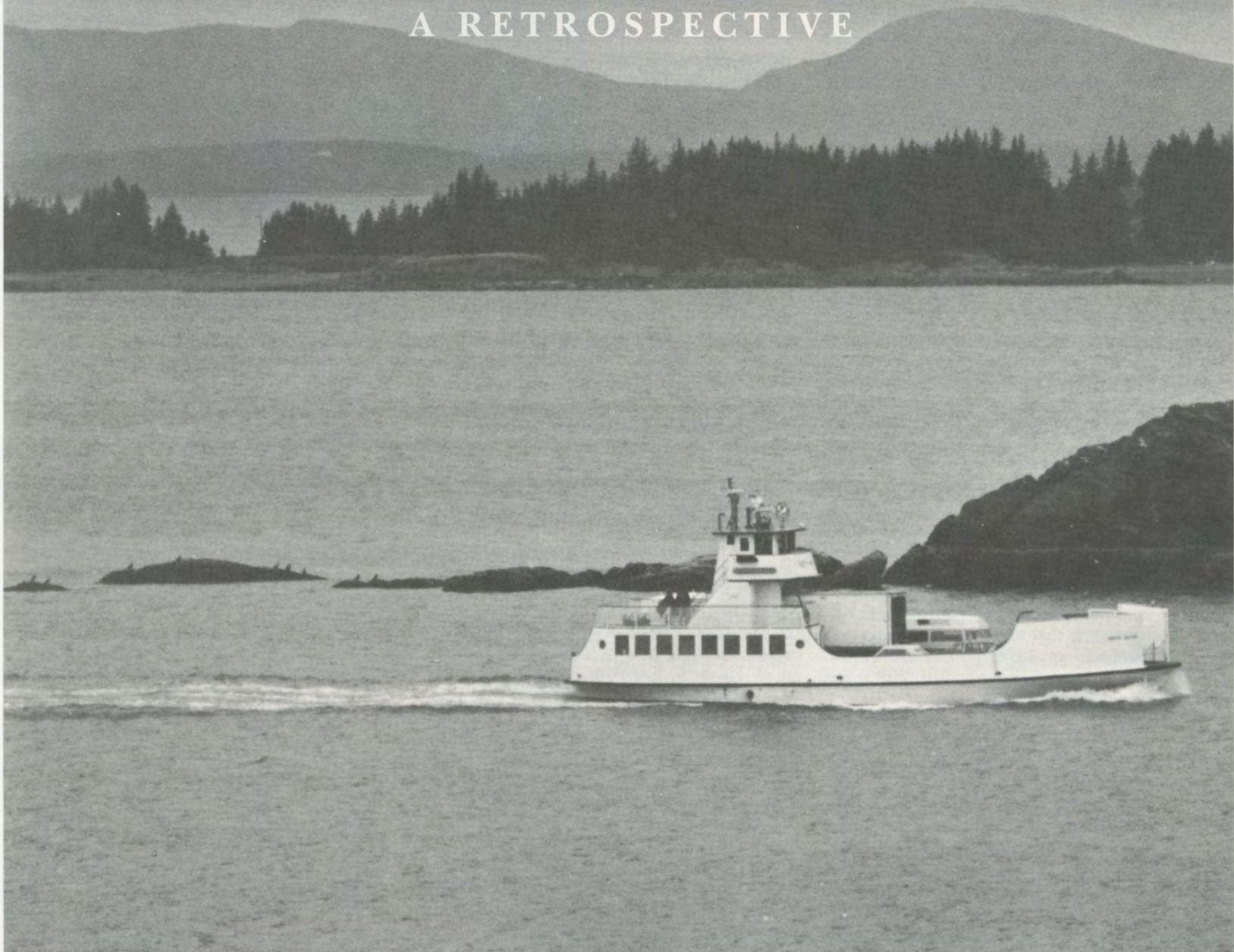
David Conover

**Our relationship with
our planet is wrong,
and it is wrong
because we have been
wrongly taught and
wrongly led.**



THE FERRY YEARS

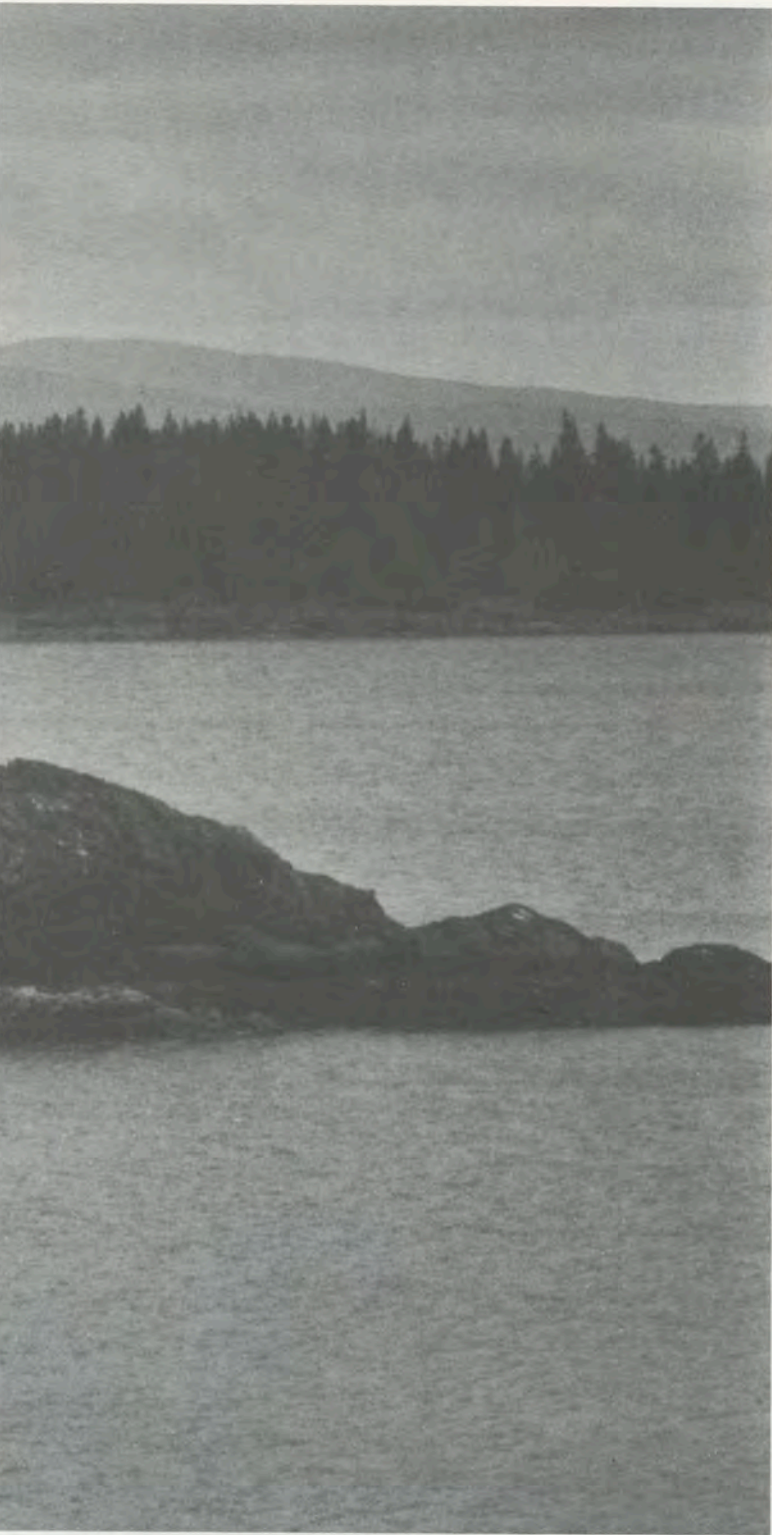
A RETROSPECTIVE



Christopher Ayres

Ferry service in the Pacific Northwest has a long and storied history, and it continues to play an important role in the region's economy and transportation infrastructure. From the early days of horse-drawn ferries to the modern, multi-deck ferries we see today, the industry has evolved significantly over the years. This retrospective explores the challenges and triumphs of the ferry industry, from its humble beginnings to its current status as a vital mode of public transportation in the Pacific Northwest.

While the industry has faced numerous challenges over the years, it has also experienced significant growth and innovation. The introduction of new technologies and materials has allowed for the construction of larger, more efficient ferries, while the implementation of strict safety regulations has ensured the industry's continued operation in the most demanding conditions. As the region's population continues to grow and the demand for reliable transportation increases, the ferry industry remains a critical component of the Pacific Northwest's infrastructure.



AS WE MARK THE 10th anniversary of the *Island Journal*, we are also bearing down on the 35th anniversary of an event of both symbolic and great practical significance to the Maine Islands: the coming of the Maine State Ferry Service. After the long years of isolation and patchwork connections, the ferries began to link the islands to the auto systems of the mainland, launching an era of accessibility: a two-way bridge linking the islands to Middle America, and Middle America to the islands. Across that bridge would come sweeping changes in island identity.

The Swan's Island Educational Society was the first to come up with the name "The Ferry Years," in an exhibit mounted for Town Meeting in 1990, but the experience itself has a far wider commonality. It is a story most of us know in bits and pieces. We have been there; we have lived it. But to see its wider contours is to understand more about it, and about ourselves.

Viewed from the short perspective, those years may look something like the tale of the sorcerer's apprentice. There is irony, to be sure. Coming back from World War II, wide-eyed islanders fought for their state car ferries in order to gain access to the larger world, the bright, bustling, baby-boom Middle America. But very quickly that ferry bridge became a siphon, draining off some of their finest talent, the island kids who went away to college and then left for good—"the lost generation" as old-time islanders sometimes acknowledge. And before long, it became a sluiceway bringing droves and droves of new residents: year-rounders attempting to live in two worlds at once, and summer people, whose increasing wealth, as the Reagan years crested, threatened to change the nature of island community.

From a longer perspective, the edges of the drama soften considerably as one realizes that only in the short run have islands been isolated. The aura of remoteness so huckstered by the media is in fact a memory of only the *middle* generation of islanders—the grandparents. The surviving elders still dimly recall a different past. Ninety, eighty, even seventy years ago, islands were not outposts but hubs, centrally positioned in a coast still primarily connected by ship, and islanders were fully enfranchised players—in fact, leaders—among their fellow Yankee traders and entrepreneurs. This wellspring of island identity was only temporarily dislocated by the inwardness of the Depression years, and when the opportunity to reclaim a larger and richer part of their heritage presented itself, islanders were not about to turn it down.

The story of the Ferry Years, then, is not so much a sorcerer's apprentice bungle—innocents swamped—but the story of an effort to reconnect, and to reclaim an island identity which has always, in its most vital elements, been based not on isolationism but in a pride in one's own roots.

The telling this tale—of four decades of tempestuous island history and change (including the 1950s that paved the way for the coming of the Ferry Years) is far beyond the scope of one *Journal*, even this 10th anniversary edition. In this issue, we will be highlighting the "lost generation"—the '50s and early '60s, laying the groundwork for so many changes in island life. In next year's issue we will focus on the 1970s and 80s in which the fruits and bitter pills both had to be swallowed—and with this hard gulp, the beginning of a new definition of island identity.



How The State Ferry Service Came to Swan's Island

Part I: Reconnecting to America

CYNTHIA BOURGEAULT

The photo, at right tells all. March 4, 1960: a bitterly cold and blustery late winter day, and some 40 Swan's Islanders are lined up on the ramp at the new, still unaccustomed landing on Mackerel Cove for an event which will change Swan's Island's history: the first ride on the new ferry, the WILLIAM SILSBY. Hope, excitement, triumph, anticipation glow on the faces of this bonechilled lot.

PEERING OUT from somewhere toward the back of the sea of faces is Swan's Islander Wesley Staples, at the time just two days past his 36th birthday. "Of course I remember the trip; remember it well," jokes Wesley—"it's the only free ride I ever got on the ferry."

But of all the gathered assembly that day, none had more reason than he for feeling proud: For the past three years he had served his community long and well as junior member of the Ferry Committee, which had successfully navigated an almost impenetrable maze of logistics, inter-island networking, lobbying in Augusta, and finally a statewide referendum, to bring the Maine State Ferry Service into existence. Little did he

suspect at the time, he admits, that that ferry boat would shape his life agenda for the next three decades.

Now nearly 70, Wesley has been officially retired from town politics since 1986 when he stepped down as chairman and charter member of the planning board. From his snug home at the head of the Steamboat Wharf Road, he can survey right from his living room window the legacy of that fateful trip. Now, in early spring, the houses across the road are all dark: summer places, still in the midst of

their long winter's sleep. What was once Main Street, Swan's Island, has steadily ceded ground to Summertime, USA. But down at the bottom of the hill, things are busy, as 18-wheelers lug off, on daily ferry runs, the harvest from the island's new aquaculture venture, and some two dozen

*Right: Wesley Staples, then 36, works on a scale model of the WILLIAM SILSBY to be presented to Senator Silsby during the inaugural festivities. (Photo courtesy of Wesley Staples)
Far right: Wesley Staples, 1993. (Photo by Jim Schwellenbach)*



year-round islanders drive up and down the hill to their permanent or seasonal jobs. It's all right there in his own doorway: the ferry years in a nutshell.

"If you knew then what you know now, would you do it over again?"

Wesley pauses for a moment, looks both up and down the hill, and when he speaks, his words feel more like a commitment than a cliché. "A-yuh," he says slowly. "You can't stop progress. Nothin's ever gained by turning back the hands of the clock."



ALL ABOARD! Swan's Islanders line up for the first run of the WILLIAM SILSBY from Mackerel Cove, March 4, 1960.

Courtesy of Swan's Island Educational Society

BACK TO THE FUTURE

Wesley admits he's a progressive, and chalks it up to World War II, where the story of the ferry years actually begins. "There was maybe 50 of us went over; all but two came back—and when we came back, we definitely had a different outlook. I don't think I ever had any second thoughts about coming back," he reflects, "but I knew I could never come back to the same Swan's Island I left."

That Swan's Island that Wes and the many others of his generation of islanders had left, was in fact a kind of time-warp: a relatively brief period of isolation lasting from the onset of the Depression through the end of World War II, a time from which so much of our island mystique disproportionately derives. In 1924, the year of Wesley's birth, Swan's was still at the tail end of the era the great-grandparents knew: bustling, commercial, worldly. The population was still over 1200 (it is 450 today). Three fish processing plants—"fish stands" as they're known locally—dotted the harbor, and regular steamboat routes connected islanders to Rockland and Boston and supported a lively summer trade. Wesley's father, Herman Staples, owned the quarry on the east side of Burnt Coat Harbor, which in those days was carrying on an active trade in paving

Talk slowly gathered of a boat that might be able to take "a car or two" across.

stone, providing what local pride still fondly remembers as "half the pavers in New York City."

But almost overnight things changed. "Dad was in the midst of an order in October 1929," Wesley recalls. "He never got paid." By early 1930 the quarrying operation was no more. One by one the fish stands shut down, as Swan's Island entered the Depression, and islanders clustered together in their three little villages faced toward sea and escaped the full brunt of poverty gripping the rest of the country by living off the incredible abundance of land and sea. Conviviality, always a homegrown affair anyway, became even more so, as the combined forces of economic depression and the slow dwindling of the sea routes in favor of land-based commerce made the island more and more an outpost rather than a hub, a world unto itself. Steamboat service fell off, and then in 1942 the U.S. government commandeered the boat for wartime purposes and Swan's Island was plunged into deep isolation.

"In a way, it was the best time Swan's Island ever knew," says Wes. "There were dances and socials, a very deep feeling of closeness." But on the troop ship, young Wesley, whose world up to that time had been the Atlantic side of Swan's Island where he was born and raised, began to connect—or reconnect—with a larger universe. Enlisting in the army, he was off to Scotland, Southampton, and then Normandy, landing in June 1944, "about a week after D-Day." By the time he got home, he had seen a fair bit of northern Europe—but more important, he had caught the spirit of "belonging to something larger," as he puts it. "We were not just Swan's Islanders; we were *Americans*."

Fifty years later, Wesley has not forgotten. "It's the biggest thing in my life," he says, still visibly moved. "Of course we'd seen more of the world, had a wider perspective, didn't want to be left behind. But more important, we didn't want to lose touch with America. We had fought for this new era; we wanted to be a part of it."

From all ends of the island they came home, Swan's Island's World War II vets, with new skills, a broadened vision, and the energy to make things happen. It did not take long before change was in the wind. By 1949 the island had organized its own rural electric co-op, and the summer and fall of 1950 were spent in a flurry of

Senator Silsby came up with a brainstorm: a classic downeast lobster bash for the legislators—lobbying in the grand old style.



Swan's Island Town Meeting, 1946

Phyllis Stinson

stringing wire. The lights went on Christmas Eve 1950—and what a Christmas spree it triggered! Swan's Island Chronicler Perry Westbrook, in his *Biography of an Island*, records that in one year (1953) islanders spent roughly \$59,000 equipping their homes with artesian wells, indoor plumbing, and some 30 vacuum cleaners and 65 television sets.

But getting all the new paraphernalia out there was at best a problem, for ferry service was still non-existent. Fred Thomas piloted the SEAWIND, a slightly oversized lobsterboat that made the torturous rounds from the Quarry Wharf in Burnt Coat Harbor over to Frenchboro, and thence up to Bass Harbor—McKinley as it was then known. Cruising sailors will recognize that this triangle contains some of the more exposed and treacherous water on the Maine coast, and the trips were long, hard, always rough—sometimes merely frustrating, other times dangerous.

"I used to hate to lug the groceries up and down the ladder," recalls Marguerite Staples, wife of present Planning Board Chairman Norman Staples (who is, remarkably, no relation to Wesley). Far more serious was when she herself had to be lugged. Developing complications late in pregnancy, she had to be taken across in a winter storm and hand-hauled up the wharf—at dead low tide. Oldsters lived in dread of those emergencies at nightfall. Talk slowly gathered of a boat that might be able to take "a car or two" across.

SHAPING A PLAN

Local memory has it that it was Ray Stinson, First Selectman, who first came up with the idea of approaching the state to help the island get a car ferry. "As I recall, that was in 1956," says Wesley, who remembers Stinson casually putting the idea on the floor at Town Meeting for further discussion and investigation. But

it would seem that considerable hashing out of the idea must have already been going on, for the 1956 Town Meeting Warrant records the proposal in fairly sophisticated form: "To see if the Town will vote to petition the Legislature of the State of Maine for a special resolve to enable the town to form a port district for the purpose of establishing a car, freight, passenger, and mail ferry service including terminals in Atlantic and Bass Harbor." That passed by a handsome vote. "I can't think of anyone who opposed it," recalls Wesley.

That same warrant article also provided for the constitution of a Ferry Committee to move forward toward these goals. Appointed to the committee, in addition to Selectmen Ray Stinson, Gene Norwood, and Loel Staples, were Guy Carleton Joyce, even then the legendary "grand old man" of Swan's Island, with roots, as his name suggests, straight back to the famous loyalist of 200 years ago; and young Wesley Staples, at the time barely past 30, and very much the representative of the new generation of islanders. In the next year, Milton Hennigar replaced Gene Norwood as Selectman and became an active participant in what were soon to become intricate inter-island negotiations.

For as it turned out, Swan's Islanders were not alone in the game. Call it coincidence, serendipity, or merely an idea whose time had come, it was soon discovered that similar notions of a State ferry service were abroad on Vinalhaven, North Haven, and Islesboro, with substantial groundwork already laid, in large part through the determined efforts of Vinalhaven Selectman Everett Libby. At the suggestion of Hancock County Senator William Silsby, the Swan's Island/Bass Harbor Ferry committee joined the deliberations, and the fledgling Penobscot Bay Ferry Service Advisory Board began to put together a package.



Barter's Wharf (the present day co-op wharf), in the late 1940s

Phyllis Stinson

This was, of course, no easy assignment, even logistically. As even present-day planners of inter-island events know, you can't get from here to there, the east-west routes along the coast having died with the steamboat trade. And if getting to Augusta to petition the Legislature is the bane of even present-day island community officials, imagine it without a ferry to get you ashore.

"I remember going over to McKinley on the SEAWIND, or our own boats," says Wesley. "Then we'd have to get ashore and walk up the hill to where one or the other of us had a car garaged on the mainland. And of course, you couldn't think of getting home that night—or maybe for the next two or three. There was very few traps got hauled that winter." But gradually, in long sessions in Augusta hotel rooms, they worked out the nuts and bolts: the number of ferries, sizes, routes, and above all, the strategy to mount in bringing it before the legislators and finally the state of Maine in a ticklish referendum.

"We had all the logical reasons," Wesley remembers. "We made the case that we paid Maine highway taxes but couldn't get to the highways. We talked about safety for our citizens, and making it possible for our children to attend high school on the mainland without having to be separated from their families. But somehow, it didn't really seem that the message was getting through."

Then in late spring of 1957, with the legislative session drawing frustratingly close to finish with no firm support for the islanders' proposal, Senator Silsby came up with a brainstorm: a classic downeast lobster bash for the legislators—lobbying in the grand old style. "It was in the old North Hotel, just a few blocks from the State House," Wesley remembers "Each island chipped in \$1100 for lobsters and booze. You never saw so much booze in all your life." There must have been more than a few qualms among the citizenry of this militantly dry island to see Town monies which had been allotted for "publicity and promotion" underwriting what surely must have been one of the finer displays of public inebriation ever mustered on this coast. But when the haze cleared and sobriety returned, islanders found they were being listened to with newfound respect. The special election was held on September 9, 1957, and the bond issue squeaked through, authorizing \$2,500,000 for ports, terminal buildings, and four new boats to serve the islands of Vinalhaven, North Haven, Islesboro, and Swan's.

According to the original scenario of the Ferry Advisory Board, the recommendations were for a six-car boat to North Haven (two trips a day in summer, one in winter), a 15-car boat for Vinalhaven (three trips a day in summer, two in winter), a 21-car boat for Islesboro (nine trips a day in summer, five in winter), and



Phyllis Simson

a 15-car boat for Swan's (six trips a day in summer, "less" in winter). As dream moved to reality, there were the usual construction delays and recalculations, but on the whole, the finished product emerged looking remarkably similar to

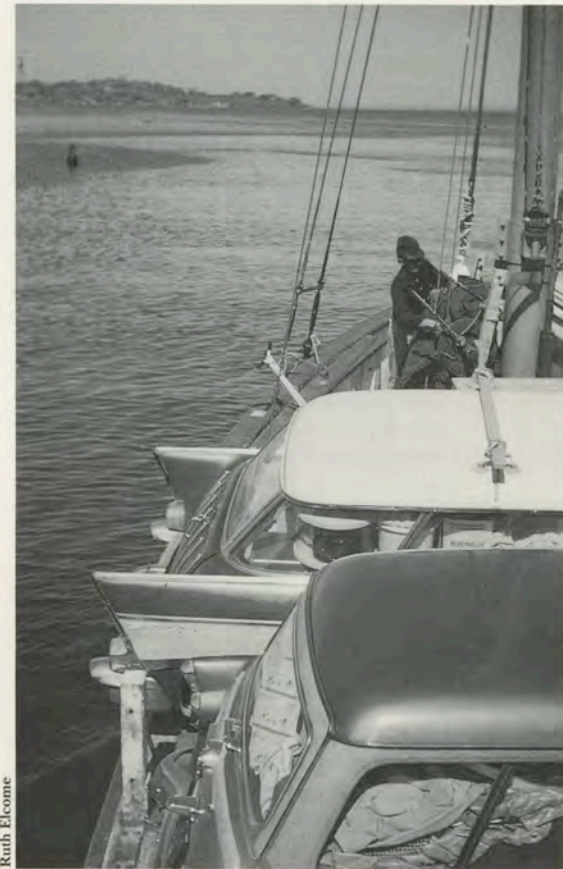
THE BEST OF TIMES — Vera Sprague, Avis Norwood, Corris Sprague, Ethel Johnson, Etta Sprague, Ernie Johnson (guest entertainer from New York), and Enna Temple at the annual Sunday School Picnic, circa 1946

**"It was like living
in a dream—everything
we ever wanted."**

the original design—a testament to careful groundwork and hard negotiations by the inter-island planning team. As the boats rolled off the ways at the Wiley Mfg. Co., yard in Port Deposit, Maryland, the islands' "great white fleet" took shape: the nine-car NORTH HAVEN for North Haven, the 12-car EVERETT LIBBY for Vinalhaven, the 21-car GOVERNOR MUSKIE for Islesboro, and the nine-car WILLIAM SILSBY for Swan's. (In 1968, the 17-car GOVERNOR CURTIS joined the fleet on the Vinalhaven run, and the LIBBY became Swan's Island's regular boat, with the SILSBY serving as backup boat for all routes.)

There was one further challenge in the works, however, before the dream of State Ferry Service moved to reality—mustered by tiny, feisty Frenchboro, a long three miles to the eastward of Swan's Island and populated year-round by some 60 hardy and determined souls. In late 1959, with boats and ports well underway, Frenchboro successfully petitioned the Legislature for a piece of the action, and after long and testy deliberations, the verdict came down that the Swan's Island boat would be shared.

At first the proposal was for a roundabout, stopping on both islands, but Swan's Islanders were firmly resistant,



Ruth Elcome

Before the advent of the State Ferry Service, transportation in Penobscot Bay was a good deal less formal.

remembering all too well the discomforts and dangers of the old SEAWIND route. After considerable negotiation, it was worked out that Frenchboro would have the boat for one round trip a week, originating from and returning to Bass Harbor, a pattern that has remained unchanged for 30 years. The friction generated in these negotiations did little to ease the traditional rivalry between the two communities, and the tandem arrangement remains a sore spot to this day.

PATTERNS IN THE WATER

"It was like living in a dream," Wesley's wife, Mary, recalls—"everything we ever wanted." That's how she remembers the halcyon days of the early 60s. With an nine-car ferry all their own, islanders made their way back and forth to the mainland. High schoolers who chose to could now commute daily to Pemetec High School in Southwest Harbor. Grocery shopping, doctor's appointments, a meal out at a restaurant—all was now possible.

But even in these first golden years, the recreational development boom still a good decade away, Swan's Islanders had already made some momentous decisions which, far more than anyone would believe, laid the foundations for the future. The first of these, innocently enough, had to do with the routing of the boat. Weighing its options, the Swan's Island Ferry Committee decided in favor of the closest connecting point to the mainland: Mackerel Cove. At very least, this required a long stretch of the imagination and flew in the face of both tradition and obvious nautical sense. For two centuries home port on Swan's Island had been the bustling, well-protected Burnt Coat Harbor, on the south side. The overland journey to the proposed new site on the north was made along an undeveloped rut track, to an exposed, north-facing "cove" connecting to the unfamiliar hamlet of McKinley, only marginally less remote than Swan's Island itself. Stodgy little Ellsworth—still years from its latterday glory as mall and outlet capital of downeast Maine—was still a good 20 miles away, and pointed in the wrong direction for long-established island sensibilities. For two centuries the island ports-of-call had been real seatowns—Rockland, Stonington—and the striking out into this new turf meant turning one's back on old ties and old connections.

"It was Carleton Joyce who really pushed for it," Wesley recalls. "His house was up t'the Mackerel Cove side, and he could see which way the future was headed. In the long run, he argued, it was going to be a lot faster and cheaper to take up the slack on the land than on the water."

Vinalhaven made the opposite decision. At one of those early Ferry Advisory

"We were not just Swan's Islanders; we were Americans."

Board meetings, it was proposed that Vinalhaven and North Haven go in together for a joint terminal on the Fox Islands Thorofare. But that involved a nine-mile drive up-island from Carver's Harbor, as well as a sharing of facilities, which Vinalhaven residents were dead set against. "They wanted their own boat," Wesley recalls. "They threatened to pull out of the whole deal if they didn't get it." So Vinalhaven stuck with Carver's Harbor, its traditional southside port and village center, and the ferry route to Rockland takes an hour and a half, navigating the rockstrewn and often fog-bound western shores of the island.

Who made the wiser choice? As in *Alice in Wonderland*, "that depends on where you want to be when you get there." Almost from the start, Swan's Island service has been convenient (four to six trips a day), economical, and rarely disrupted. The swift, 40-minute crossing time permits a late boat every day (4:30 in the winter, 5:15 in the summer), which in turn has made possible a pattern of daily commuting, available to high school students and even attempted by some island residents, though usually with no long-term success.

Vinalhaven's boat, on the other hand, has been a limit rather than a spur to growth. Because of the long sea run, tickets are more expensive and trips less frequent. Daily commuting to a regular job on the mainland is out of the question, and long backups in the ferry line are a way of life. And for these very reasons, Vinalhaven has tended to hold onto its essential community services while Swan's has tended to barter them away in favor of the easy accessibility to the mainland.

Almost from the start repercussions of this pattern began to show up. The Swan's Island of Wesley Staples' boyhood had been dotted with little stores, and even into the early 1960s, these still lingered. Ethel sold milk and a few groceries at the Atlantic post office, there was another store near the present Seaside Hall, and backyard garages and repair shops were almost as numerous as the backyards themselves. Now many of these closed. So too did the Doctor's clinic in Atlantic. Within a decade, most of the "mom and pop store" mercantile feeling of the island had been lost, and in its place came a growing dependency on the mainland for services formerly performed by islanders themselves. On all

state ferry islands this tendency is present, but on those most convenient to the mainland, it has happened first and most pervasively. On a typical workday on present-day Swan's Island, a walk down the ferry line on the Bass Harbor side reveals an armada of service vans bearing electricians, plumbers, appliance repair personnel, and school and medical specialists; while the Swan's Island side heads to the mainland for groceries and major shopping, auto repairs, medical appointments, and entertainment, a function once at the heart of island community life.

Has it been a fair trade-off? Most Swan's Islanders emphatically champion the cause of progress, though not without an occasional hankering back to those earlier, simple days when the island was a world unto itself. "It was the best times of our lives," Wesley reaffirms, yet "you can't stop progress. Times were changing." But privately, among themselves, islanders confess to a darker side of this: not so much chasing after the future as being dragged into it. Norman Staples, Wesley's successor as Chairman of the Planning Board and himself a 30-year veteran of Swan's Island politics, speaks quite candidly. "We had to have the ferry," he says. "We would have lost the community otherwise. After the War, islanders wanted more for their children. They would have moved off if they couldn't get to the mainland."

"As it is," he adds quietly, sadly—"we already pretty much lost a generation. The educated kids went to college and left." He points to his own family: two of his three sons off the island, making their way as professionals on the mainland. "The lost generation—the baby boomer kids. You look at the leadership on the island today and they're all a little older or a little younger. That generation that ought to be running the place is mostly absent. It's taken its toll."

And indeed, this ambivalence has left its mark. In a curious double-message, islanders wish their kids to be educated—and yet there is that fear, learned from a lost generation, that too much education leads off and away, destroying a closeness of kin and community that island life has always been all about. Even more poignant is the corollary: the haunting doubts that *only the losers remain*. Such is the shadow side of accessibility, the unspoken fears about identity and self-worth that have shaped island character for a generation or more. Even before the tourists arrived, the seeds of doubt had already been planted.

"The Ferry Years" will continue in next year's Island Journal as Part II, "A Two-Way Street," traces the recreational development boom on Swan's Island from its headwaters in the early 1960s, through the zoning and enforcement battles of the '70s and '80s, to a new vision emerging in the early 1990s—"Swan's Island for Swan's Islanders."



“The More Things Change, The More They Get The Same...”

Why recreational culture kills island life

GEORGE PUTZ

THERE IS NO MYSTERY about what is happening as a result of recreational development on Maine islands. On the islands with ferry service the process has gone through various stages for a number of years. The kinds of recreational development I'm talking about can be dated from the late 1950s or early 1960s; that is, when we move from “old money” rusticators' compounds into more and more middle class seasonal visitation, with different purposes, goals, and expectations. This is now moving into a third phase, where we see increasing numbers of itinerant visitors, looking for yet another, more superficial kind of island experience.

Nor is there a mystery about what happens physically to these places as recreational development gains a foothold and then a stranglehold. Older New Englanders will recall what Cape Cod was like 40 years ago, Martha's Vineyard and Nantucket 30 years ago, and the southern Maine beaches 20 years ago. All of these

places have become very different from what they were. Among other things, these places used to be different *kinds* of places, *unique* places, not only with different kinds of geography and natural history, but also different kinds of heritage, uses of the English language, and patterns of interaction. By simple observation we understand that a pandemic kind of phenomenon happens because of recreational development. All these places are becoming more and more alike.

Our problem is not lack of data but lack of vision. I call it “undersight” — an inability to look up and see what is before us. For if recreational development leads to homogenization, there is a principle governing this evolution, and that principle is even now playing itself out in our Maine island communities. As the local economy shifts from an indigenous one to a more generalized recreational one, predictable things start to happen which affect the community on all levels of its identity and functioning.

Over the past 20 years, on my own island of Vinalhaven, we have seen the collapse of “fishhouse culture” in favor of a more mercantile, recreational social structure. With an ever-larger number of supercilious and superfluous itinerant bodies infusing the landscape, the institutional fabric



changes over time. I live in a place which has a work ethic—where you are a valuable human being if you’re hammering with your hammer and sawing with your saw, or repairing a net; where you are busy. And if you’re on the street, you’re on the street to get something, on errands. You are occupied. As there begin to be larger numbers of physical bodies just wandering around, something in you gets a little rattled. I’m not talking about the pestiferous aspects of this; I’m talking about the symbolic ones. You know: “What the hell are these people doing here?”

You may take this lightly, but it grinds on the work ethic. How come we can’t do that? And this goes right to self-esteem, and brings an inevitable consequence: a growing emphasis on police and other services that formerly were not necessary. On Vinalhaven we used to get away fine with one part-time local constable. Now, with no increase in year-round population, the island requires three officers—these because of the encroachment of essentially displaced itinerant personalities and their effects on the cultural fabric. As these newcomers increase, social requirements escalate by orders of magnitude.

Then there are matters of family values and social balance. In *Maine Pilgrimage* Richard Saltonstall talks about essential family values as they apply to rural Maine generally and to the islands specifically. As a local culture begins to change via these shifts in economic focus, you begin to lose poor people. As there come more and more itinerant bodies, more people ask about properties for sale. And they start buying them, placing demand pressure on the land. Land prices go up, pressure on the tax base increases, and the first to be displaced are the poor.

But then you also begin to lose the land-owning lower middle class, because they can no longer stand these burdens (or temptations) either. There has been a 900 percent increase in land values on Vinalhaven during the last decade. That’s nearly 100 percent per year. As this patrimonial alienation occurs, and you

**I live in a place
which has a work
ethic—where you
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are busy.**

begin losing your poor and lower middle class working groups, this gradually saws away at the health of the community. In light of established mercantile values this sounds like an odd thing to say, but the presence of these people IS critical to community health. When they are gone, you don’t

have a community any more because you don’t have a critical mass. Schools must have a critical mass. The year-round community must have a critical mass. Transportation infrastructure requires a critical mass. The social spectrum of fraternal orders, voluntary associations, churches, and so forth, requires a critical mass of enfranchised people. As soon as they are removed, you no longer have a healthy community. You no longer have a community at all.

All you have to do is to walk through some of the small, formerly fishing towns on Cape Cod in winter, and you’ll understand exactly what I’m talking about. Those places in February are deadlier than doornails. The only people visibly in town during business hours are the three cops, presumably guarding the dozen realty offices being run by telephone answering machines.

As the economic basis of a community shifts, the vise tightens relentlessly on traditional maritime activities and the physical infrastructure required to support them. For all Vinalhaven’s 172 miles of twisted, ledgy shoreline, there is only about a half mile of it, *total*, appropriate to sustain the wharves, fishhouses, assorted piles of rope, traps, nets, and other necessary paraphernalia of the commercial fishing community—the working waterfront. When you begin to nibble away at even tiny bits of this truly useful shore-side land, you are literally cutting the ground out from beneath a community’s traditional lifeways.

Long before you’ve arrogated half of the working and dockage shoreline to recreational purposes, you’ve already created an enormous impact on the ability of working men to occupy themselves in traditional ways. Just as soon as you see an interest in converting to recreational uses, the game is basically already over, even for the highline fishermen, the quarter-million-dollar-cash-turnover guys who can afford their required work spaces. Beyond the costs of wharfage and fishhouses, places to stack gear, and so on, when the water-

front market is tuned to recreation, you get more and more people who don't like the smell of bait, piles of encrusted rope, and guys who say things like "fuck" in loud voices, all day and night, sometimes little else. Ostensibly genteel people don't like to hear that.

And eventually the new genteel sensibilities will prevail by sheer economic clout. Take banking, for example. Banking practice is one of the first things to change when a community's economic focus shifts. If a loan officer in an island branch bank has a choice to make between an apparently iffy \$15,000 loan for electronic fishing equipment, using the boat as collateral, and the same amount of loan toward a terrestrial recreational establishment, you can forget the electronics. Risk capital is just like any other addictive predication—you go with the best, least risky option available.

The real loss, though, is deeper than economic—deeper even than just cultural, in the sense of perpetuating an assortment of eccentric or "quaint" cultural byways. It is in essence an impoverishment of our whole human condition in its capacity to feel and respond to those dimensions of life that are deeper than sheer pragmatism. Walk down the main street of any island town, and you can't help but feel the pervasive power of the institutions that have shaped its life. They are not just buildings or people meeting together; these are patterns of expectations, with rituals and historical continuity. There are rules prescribing what (and who) is inside and outside the boundaries; rules of exclusion, and so forth. These undergo rapid change as a community's institutional structure shifts. For example, as you move to a Chamber of Commerce, Rotarian sort of institutional fabric, expectations shift. The community becomes "dispirited" as it shifts from the Masonic order, the Red Men, or other sorts of secret societies and religious groups, where there's a direct connection to the mysticism of the family, of what it means to be a man or woman, wherein life itself is fused with mystery. All this gets pared away, until you have a much more simple-minded, pragmatic, symbolically impoverished institutional life.

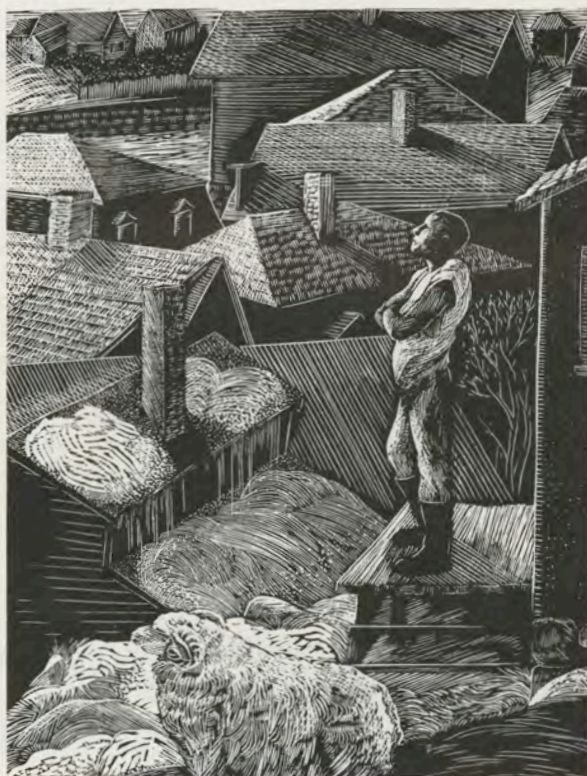
And this dispiritedness, sadly, works its way into the

Walk down the main street of any island town, and you can't help but feel the pervasive power of the institutions that have shaped its life.

next generation. For 200 years of island history, a 12-year-old boy, if he was going to amount to anything, was going to be a fisherman, a boatbuilder, or in some other way a principal in the maritime economy. And now we've locked him into schoolrooms dominated by people from away who teach him how not to be very sure at all about what he may want to do. You know what I'm going to do when I grow up? I'm going to sell hot dogs to tourists! So I can be just like these people who bought the house and are turning it into a bed and breakfast place, because when they close down in the fall, instead of having a house full of little boys and girls becoming islanders, they just close it up, take the money they've made during the summer, and spend it in Florida. Now there's some way to run an island community!

There are no more roller skates on the street or sidewalk. There is no bike with a broken sprocket, and there isn't any laundry flapping in the breeze or gossip going back and forth between the houses. It's just a dead place, with the wind whistling through the eaves. And those kids that aren't there anymore aren't in school becoming distinct, proud islanders. We've not only changed history in this regard; we've in a large part eliminated it. Through oversight we have allowed yet another vibrant pocket of cultural diversity to slip away from our human family.

A while ago I traveled out to California with my family; spent a month, drove 9000 miles, and, being of modest means, stayed in a lot of budget motels. From decor alone we could never determine where we were in the morning. You haven't the faintest idea, because it looks exactly like where you were 600 miles ago the day before, and thence ahead tomorrow. This homogenization process is universal, and unless certain decisions are soon made, based on pride in regional identity and cultural carrying capacity, early in the next century—except by the grossest of features—we won't be able to tell one place from another.



George Putz was founding editor of the Island Journal and a prolific writer on all aspects of island and maritime culture. The foregoing piece was adapted from a talk he gave at the Maine Island Recreation Conference in May 1986.



THE GREAT MAINE LOBSTER WAR

PHILIP W. CONKLING

In the late winter of 1991, after several months of very bad weather, the wholesale price of lobster—the amount dealers pay to individual lobstermen—soared to \$8 a pound, which meant that a lobsterman might earn \$1000 in a short day for landing less than 100 lobsters. This record price was not big news at the time, because most of us have lost the capacity to be surprised at the price people are willing to pay for the privilege of eating a lobster in any season. But few people understand how radically the business of lobstering has changed in the past few decades. And even fewer know the story of how a handful of Maine lobstermen 35 years ago united all Maine lobstermen and went to war with a powerful group lobster dealers who effectively rigged the price lobstermen could get on the market. These lobstermen, led by Leslie Dyer of Vinalhaven, achieved a unity of purpose within this most notoriously independent group of men which had never been achieved before and rarely since. They would also suffer financial hardships, would be investigated by the FBI, indicted and convicted of conspiracy by the federal government. But along the way they also transformed the Maine lobster industry and improved the economic fortunes of lobstermen forever after.



Leslie Dyer, first president of the Maine Lobstermen's Association

LESLIE H. DYER was born on Vinalhaven in 1898. Like his father before him, he went fishing part-time as a young boy, hauling traps from a sailing skiff beginning when he was 11. After graduating from Vinalhaven High School in 1916, Dyer enlisted in the Marine Corps and served on the battleship USS TEXAS during World War I. At the end of the war, Dyer returned to Vinalhaven, married Hazel Rogers, the daughter of Captain Frank Rogers, and became a fulltime fisherman. Leslie and Hazel produced eight children, three of whom became Vinalhaven lobstermen.

After scraping out a living during the mysterious and inexplicable lobster decline

of the late 1930s and '40s, Leslie Dyer and other Maine fishermen began noticing a change in the early 1950s when lobsters began to be more plentiful and landings steadily increased. No doubt part of the increase in landings reflected the energy and skill of large numbers of veterans like Les's sons, Bert and Junior, who returned to Maine to fish after the war, but supplies of Maine lobster rose faster than the dealers could market them throughout New England, particularly during the summer shedder season. Prices which would hold steady in the 35- to 50-cent range throughout April and May would start dropping in July, August, or September just as the big catches of the season started to be landed, infuriating lobster catchers the length and breadth of the coast. When the shedders struck, most of them had to perish or be sold fresh to tourists streaming down into Maine on old Route 1.

In 1954, after weathering two summer hurricanes, lobstermen were discouraged when prices hit a low of 25 cents a pound

at the end of the summer. Lobstermen were convinced that dealers acted in concert with one another to lower prices right before the shedders struck. A group of irate fishermen from Beals Island contacted their counterparts on Vinalhaven, including Dyer, through a Rockland attorney, Alan Grossman, and a brief statement soon appeared in the Portland Press Herald, outlining plans to form a statewide organization of lobstermen to "halt the price-fixing by dealers so that lobster fishermen can make a livable income."

A meeting at the old Thorndike Hotel on Main Street in Rockland was called for October 11, 1954. Lobstermen from the entire Maine coast were invited, and 300 showed up. At the advice of Alan Grossman, who had lobbied on behalf of lobstermen in the legislature in previous years, they decided to form an association under which they could legally (or so they thought) organize opposition to what they viewed as unfair collusion among dealers on lobster prices.

Leslie Dyer of Vinalhaven was the unanimous choice as the first president of the Maine Lobstermen's Association, with Farrell Lenfesty of Beals Island its vice-president, and Rodney Cushing of Cliff Island its treasurer.

Dyer was chosen perhaps because he had given voice to the delicate balance that any leader of lobstermen must constantly maintain: "We fishermen in Maine are as independent as a hog on ice," said Dyer, "and just as helpless. We're more or less sot in our ways and we don't like to be dictated to."

Independent they may have been, but not helpless; these lobstermen were also risk-taking pioneers. Dyer and the other founders of the MLA began trending up and down the Maine coast visiting every lobster harbor between Kittery and Eastport to build support for confronting

Lobstermen Urge Complete Shutdown Of Trap Hauling

Headlines from the Dyer family scrapbooks

the powerful dealers who controlled their economic destiny.

In the summer of 1955 natural disasters struck the lobster industry. Heavy rains flooded coastal lobster pounds killing 300,000 pounds of lobsters. Prices dropped again to 25 cents for shedders as dealers cited their need to rebuild inventories. Dyer released a statement to the press asking Maine lobstermen to stop hauling their traps until the price went

harbor. Within a few days, upwards of 4000 lobstermen, many of whom were still being paid 40 cents a pound for their lobsters, had tied up their boats in sympathy with Casco Bay lobstermen along the entire Maine coast from York to Lubec.

For the first time in the history of lobster fishing, Dyer had achieved an astonishing show of cooperation among a large group of fishermen who then, like today, celebrate themselves as an archetype of the last American individualists. Six days after the start of the shutdown, dealers all along the coast announced a return to 35 cent lobster prices, and Maine's first lobster strike was over. For Dyer and his new Maine Lobstermen's Association, it was an astonishing victory.

FBI Acknowledges Its Agents Probing Maine Lobster Row

back up to 30 cents. "We refuse to go along with the idea that we were responsible for the flood. We're perfectly willing to help those dealers that got hurt, but we don't feel we are carrying insurance on their lobsters."

In 1956, after two years of skirmishes, the battle between lobster catchers and dealers was joined in earnest. In June at their annual meeting, members of the Maine Lobstermen's Association, who numbered perhaps 1000 of the 6000 registered Maine lobstermen, voted to push for a minimum price of 35 cents for shedders and 50 cents for hard-shelled lobsters, citing these as minimum prices at which they could make a living lobstering. In a later meeting with dealers, the MLA secured an agreement with dealers that if a seasonal oversupply developed, the association would be notified so it could ask lobstermen to stop hauling until supply and demand would result in a 35 cent price.

The 1956 Strike

In July 1956, however, shedder prices dipped from 37 to 30 cents in Portland, and 300 Casco Bay lobstermen met and decided to tie up until the price climbed back over 35 cents. It shortly did so, but then after Labor Day, it sagged back to 30 cents in Portland, and that price spread to Friendship, Port Clyde, and Rockland. Normally after Labor Day, dealers begin storing lobsters in pounds constructed in dammed up tidal coves, allowing a portion of the catch to be held for later in the fall and winter when restaurant prices are high. Although dealers cited a "glut" of lobsters to explain the lowered price, Dyer charged bad faith by "one big out-of-state dealer to drop the price without first asking lobstermen to halt production," as they thought had been agreed. Dyer then called for the first coastwide tie-up of all lobstermen in Maine.

The "Lobster Strike," as it came to be called, was an electrifying event along the waterfront as word of the shutdown spread from radio to radio and harbor to

Lobster Dealers

"Hell," Bert Dyer, one of Les' sons, told me one day, "of course they dealers were price-fixing. Everybody could plainly see it. Christ, every morning the dealers talk on the telephone and decide what the price is going to be. They still do."

"For a couple of years back in 1956 and '57, my father and I and a few others started selling our lobsters into Rockland. We were getting 37 cents—seven cents over what our dealer was paying us out on Vinalhaven. Seven cents was quite a lot. We'd car them and then once a week go over to Rockland to sell them and do our shopping. Christ, the [Vinalhaven] dealer was mad. He wanted those lobsters, you know. But seven cents! We had to bring our bait over in barrels. Of course we couldn't get any from the dealer. Jesus Christ, he wouldn't waver. Nothing. They wasn't too happy about handling all that bait on the mail-boat. But hell, we'd haul it on and off the boat and salt it ourselves. And we torched herring. You could still torch 'em at that time [usually with kerosene soaked spruce branches whose light brought herring to the surface]. Put the fire to them. We had all the bait we needed."

The 1957 Lobster War

A year after the first lobster strike in Maine, history repeated itself. In mid July 1957, prices sagged to 30 cents, and almost immediately the lobster price war was re-ignited with the Maine Lobstermen's Association voting on July 19, 1957, to "tie up the whole coast of Maine." Leslie Dyer urged lobstermen to

"stick together as we did in 1956. We are not unreasonable when we ask a small profit on our product." Dyer continued to press his case in the newspapers, but the dealers mostly refused public comment during the 1957 strike, so it is hard to get a picture of how much of the price problem represented an increase in the actual number of lobsters being landed and how much of the "lobster war" resulted from their fear of the growing power of the Maine Lobstermen's Association.

Soon after the call for the 1957 strike, cracks started to appear in the MLA's united front. Downeast in Jonesport, Beals, and Cutler, where waters typically warm later than those in Casco and Penobscot Bays, lobstermen were still catching high-priced hard-shelled lobsters and were reluctant to tie up again in sympathy with Casco Bay lobstermen. And a group of independent-minded lobstermen fishing out of Pine Point, Saco Bay, defied the call for the tie-up. They announced they would continue to haul. "Last year we tied up, but it cost us a lot and we can't see doing it again," one Pine Point lobsterman said to a Portland Press Herald reporter.

As Portland area dealers prepared to shut down and ride out the strike in the face of the growing power of the MLA, Dyer said, "I can't understand how 95 percent of the state's lobster dealers can pay 35 cents a pound when the remaining five per cent can't." One Portland dealer, Roland Hurtubise, president of the Maine Lobster Company, sent a telegram to Dyer advising him that he had recently purchased a large number of lobsters from Casco Bay fishermen who "can no longer tolerate your attempts at regimentation of their business and family lives," and charged that Dyer and a "minority group is employing big-time union tactics." In the newspapers, MLA

Federal Grand Jury Will Probe Maine Lobster Price Row

attorney Alan Grossman reminded the public that membership in the association was voluntary, that the MLA couldn't tell members not to resume hauling, and that they were emphatically not a union.

On July 25, 1957, under mounting pressure, Dyer announced a compromise decision for MLA members. Any member who could get 35 cents was free to resume hauling. Most downeast lobster catchers returned to their pots. With that

decision Casco Bay lobstermen conceded they had lost the "first round" in their nine-day price war with local dealers and also began hauling their traps the next day.

Almost immediately, however, lobster dealers in midcoast Maine suddenly dropped their price to 30 cents, and the temporary lull in the price war ended as tie-ups spontaneously occurred in Tenants Harbor, Spruce Head, and many other lobstering harbors around Penobscot Bay—then as now, the heart of Maine's lobster waters. Harbor by harbor, lobstering slowed to a crawl all along the Maine coast except in Casco Bay where lobstermen were "hauling like mad" to get cash in their pockets before joining the second strike on July 31.

By the beginning of August, Dyer estimated that 4500 lobstermen had quit hauling. MLA membership continued to grow, reaching 2600 that summer. "We have figured out that the average earnings of Maine lobstermen is \$1500 a year," he said. Without the MLA, Dyer predicted that lobstermen would be paid 25 cents for their catches. "The dealers are out to bust up the Association, but we are too strong," said Dyer. "You have shown that you have the guts to stay out." Then he added, "Governor Muskie will see to it that you boys get justice." In fact, on August 2, 1957, Governor Edmund Muskie suggested a fact-finding commission might help resolve the dispute, although official action was "outside the scope of my authority." Nevertheless, Muskie went on, "In these circumstances I feel an obligation to make suggestions as they occur to me and to offer my services to the extent that they may be welcomed by the parties to the controversy."

Although both Leslie Dyer of the MLA and Harold Look, a veteran lobster dealer from Rockland and spokesman for the dealers, responded favorably to Muskie's offer, a week later the dealers had stalled on meeting face to face with the MLA which they believed was interfering with their businesses and trying to avoid the laws of supply and demand. Portland dealer Roland Hurtubise publicly suggested that Governor Muskie's mediation offer was "unnecessary," and in a letter to Dyer told him that "public opinion will not sell your lobsters over the market place," adding "the housewife is entitled to buy merchandise at a supply and demand level."

**Clergyman-Lobsterman
Identifies Boy He
Claims Shot at Him**

8/2/57
**7 More Lobstermen Appear In Probe Here
And All Declare They Don't Know A Thing**

The lobstermen could afford only to stay out so long, and the dealers knew it. Predictably, economic pressures were beginning to show. On August 6, 1957, the Portland Press Herald reported that boats from Boothbay Harbor had all been fishing the previous day as well as those from South Bristol and nearby Christmas Cove, and that Maine's three fishermen's co-operatives at Pemaquid, Boothbay Harbor, and Stonington were all paying 35 cents per pound for lobsters.

The same day MLA President Les Dyer called an "emergency meeting" of MLA's coastal delegates in Rockland and announced, "The press will be welcome at the meeting. We have nothing to conceal. All we do is done in a goldfish bowl." In an extraordinary meeting an estimated 600-700 lobstermen attended the meeting in Rockland and debated strategy.

"Convert the heathen," advised Dyer, referring to those lobstermen who had begun to haul their gear. But other speakers expressed their concerns. The longer they stayed ashore in hopes of higher prices, the greater the supply when they returned to their traps. One dealer was quoted as saying that if the price was currently 30 cents with relatively few lobstermen hauling, he could "guarantee 20 cents in 10 days." Nevertheless, in a secret ballot of MLA members, they reasserted their intention to stay ashore by a 250-94 margin. Newsmen who covered the meeting were drafted to count the ballots.

Heat of the Battle

Tensions continued to mount. Evans Doughty, a highline lobsterman from Two Lights, Cape Elizabeth, had told the public meeting when Casco Bay lobstermen voted for the second tie-up that he intended to keep hauling. He warned that if any of his gear or boat were harmed, he'd "go through the Association and there wouldn't be a buoy left in the whole ocean." Before calling the emergency MLA meeting in Rockland, Dyer had taken pains to point out that there had been no violence along the coast, although "a lot of boys are pretty hot." As noted in the Rockland Courier Gazette article on the MLA emergency meeting, "Cash is getting short with many lobstermen, and tempers can and may flare as they see their neighbors fishing and having an income while they stick to their principles."

Two days after the Rockland meeting, approximately 100 Casco Bay lobstermen met informally in the early morning and

decided to go back out on the water to haul. "A lot of boys are running out of money," said one lobsterman as he drifted away from the meeting and headed for his boat. Then

harbor by harbor over the next several days, lobstermen voted to go back to work. Dyer said that lobstermen were returning to the water out of "economic necessity," and will haul "under protest."

Even as lobstermen began returning to their gear, the first hint of violence was reported in Rockland and Portland newspapers. On August 3, 1957, according to a Knox County Sheriff's Department memo, a part-time lobsterman and part-time minister, Rev. John Holman, who had continued to haul with his son during the tie-up, reported that he had been fired upon in Tenants Harbor by striking lobstermen. A few days later Holman, the pastor at Advent Church in Port Clyde, reported his dory was missing from the wharf where it had been tied up.

"There was some hard feelings about

**Lobster Industry
'Scairt and Mad'**

those that went hauling during the strike," Bert Dyer recalled many years later. "There wasn't too many of them; there was about six or seven on Vinalhaven out of 175 fishermen. That bothered the old man like hell because they'd always throw it back to him. 'Well your island ain't 100 percent tied up.' Jesus, we was tied up for 10 days and we had just started in on the shadders.' Course Casco Bay, they get them a month earlier, and, hell, they already had a month of big fishing. They had money in their pockets. But us down here, we just started into the shadders and, Christ, it hurt. But the price had gone to 30 cents, and they was talking 25 cents."

"Feelings ran high against those six or seven fishermen. Some of the guys, they took those names right off the fishhouses and wouldn't let 'em come back. 'Christ,' they said, 'I wanna be goddam sure I know when that Christless scab dies, so's I can take the flowers right off his Christless grave.'"

Federal Conspiracy?

The Maine Lobstermen's Association's summer-long battle with the fraternity of dealers failed to break the grip that a relatively few companies exercised over the lobster industry in 1957, but a nearly inexplicable turn of events soon turned the

controversy from a coastwide issue into a national cause célèbre.

The U.S. Attorney's office in Portland began investigating charges of coercion during the lobster strike, and Eisenhower's Deputy Attorney General, William Rogers, ordered a Federal Grand

"IF WE GO DOWN, WE'LL GO WITH OUR COLORS FLYING!"

Jury investigation into the bitter price dispute. Two Justice Department antitrust lawyers were assigned to the probe. A few weeks later the FBI was called in to assist in the investigation, to determine whether possible criminal violations had been associated with the gunfire incident in Tenants Harbor as well as investigating the numerous reports of trap cutting.

Two months later the grand jury, to the astonishment of everyone, returned price-fixing indictments not only against seven lobster dealers, but also against the Maine Lobstermen's Association and its president Leslie Dyer. Dyer and the MLA were charged with conspiring to set a minimum price for lobsters and inducing others to agree to do the same. The dealers were charged with conspiring to set a maximum price at which they would purchase lobsters and inducing other dealers to join in the agreement. Immediately lobstermen raised a howl of protest. As one letter from a Swan's Island fisherman to the editor of the Rockland Courier Gazette put it: "I want to be a member of an organization that the Federal Grand Jury has indicted for what really amounts to trying to get a decent living wage for its members."

The Boston Herald, in an editorial that was reproduced widely up and down the Maine coast, wrote: "To the corn farmers, the government says, 'You are producing too much; hold back and let the price rise.' To the Maine lobster fisherman, the government says, 'Stop holding back even if there are too many lobsters and the price is too low.' The merits of the case we leave, of course, to the court. But we do wonder why too many lobsters are different from too much corn."

A similar editorial soon appeared in the Bangor Daily News: "Maine lobstermen...are only seeking to keep pace with the high cost of living. The latter in turn is caused in no small part by the government support of farm prices—the same government that is prosecuting the lobstermen. Confused? So are we. And so, we imagine, is the ponderous bureaucracy known as the federal government."

When landing statistics were released for the year, the industry's problems were revealed in black and white. In 1957 Maine lobstermen landed a record 24.4

million pounds, almost 4 million pounds more than the 20.5 million pounds that were landed in 1956. But lobstermen's aggregate pay totaled \$8.9 million in contrast to the \$9.1 million they had earned the previous year. Lobstermen, just as they had been saying, were actually producing more for a smaller total return.

The government's antitrust trial against Dyer and the MLA was set for the spring of 1958, which gave lobstermen the winter to talk things over. Several lawyers, including Philip Chapman of Portland and Stanley Tupper of Boothbay Harbor, volunteered their time to help defend lobstermen against the government, but a fund was needed to help cover expenses during the trial in Portland. The MLA announced a series of fundraising "mug-ups," a term fishermen used when they rafted up their boats for a cup of coffee or a shot of rum to talk things over. Mug-ups were scheduled for Vinalhaven, Owls Head, and Martinsville, in Penobscot Bay; at Addison and Beals Island Downeast; and on Long Island in Casco Bay.

The newspapers reported every move the lobstermen made. One 67-year-old part-time fisherman wrote to Dyer: "Money is scarce with me as probably it is with most other fishermen at this time of year. Now here's what I will do to help fight for the Association's rights. I will give the Association a cord of first-class, four-foot, dry cordwood." Dyer said, "We're going to find a buyer for that cord of wood. First off we need the money. Our lawyers are giving their services free, but they tell us it's going to be a long, drawn-out affair and we'll need at least \$2000 for living expenses down in Portland."

"Scairt and Mad"

A circus atmosphere developed almost immediately as the trial got underway May 19, 1958, under enormous press coverage, in Judge Edward T. Gignoux's courtroom. Government lawyers revealed that the federal investigation was initiated after a Portland attorney — the brother of one of the indicted dealers — had complained to Washington about the MLA's alleged strongarm tactics and price-fixing. Lobstermen reading newspaper accounts of the complicated pre-trial rituals were described as "scairt and mad."

The government lawyers had subpoenaed five lobstermen as witnesses against Leslie Dyer, the only individual lobsterman indicted in the price-fixing charge. They said they would show that Dyer and the MLA had coerced lobstermen into refusing to haul in violation of the

Sherman Anti-Trust law. One of the first witnesses, Myles O'Reilly of Cliff Island (described in one press account as a "lean and windburned fisherman"), said he had tied up the previous summer not as a result of "strike vote," which he characterized as an "opinion poll," but as a gesture of courtesy to Governor Edmund S. Muskie. O'Reilly said he tied up because "our representatives were to meet with the governor, and I thought it would be discourteous not to see what he could do for us."

O'Reilly, although an MLA delegate from Cliff, insisted that it had not been necessary to call a meeting to discuss tying up because meetings spontaneously took place on the island. "We don't have to have meetings," he said—"we congregate in the grocery store," adding that if he needed to get word out, "All I have to do is tell the president of the Mother's Club."

Then O'Reilly apparently stumped the government lawyers when he mentioned the activities of "some of the boys Downeast."

"Where is Downeast?" asked U.S. Attorney Joseph Nowlin.

O'Reilly stared owlishly at the lawyer and replied, "Anything east of Cliff Island is Downeast," adding, "Cliff Island is not east of Maine."

Near the end of his testimony O'Reilly complained that during pre-trial confer-

Jury Finds Lobstermen Guilty Of Price-Fixing

Sentencing Deferred In Federal Case

ences Government attorneys had tried to "brainwash" him. Judge Gignoux ordered the comment stricken from the record and told the jury to disregard the comment.

Subsequent questioning of other witnesses during the early days of the trial did not appear to add a lot to the government's case. Robert Waddle, a lobsterman from Brunswick described as "crew-cut and tieless" was declared a "hostile witness," by Judge Gignoux after repeated memory lapses about what Leslie Dyer had said at the infamous MLA strike meetings at the Thorndike Hotel in Rockland.

The following day, a second lobsterman, Alger Burgess of Chebeague Island, after being twice warned by Judge Gignoux for arguing with Government attorney Alan Lewis, was ruled a hostile witness. Burgess, described as "neatly clad in tweed jacket and flannels," said he couldn't remember if Les Dyer had spo-

ken at the July 19th or July 29th meetings. Under repeated questioning, Burgess was asked if Dyer had urged MLA members to stop lobstering until the dealers offered 35 cents. "Dyer never told anyone they had to do anything," said Burgess.

Lewis then bore in on Burgess's activi-

Lobster Trial May Lead To Better Days For Fishermen

ties around Chebeague Island, particularly his conversation with Ray Hamilton, a Chebeague lobsterman who complained Burgess had attempted to coerce him to stop hauling. Burgess admitted he patrolled the Chebeague area in Casco Bay in his boat during the tie-up, flying the red and white MLA flag from his boat. Only half of the 45 lobstermen on Chebeague Island were MLA members, said Burgess, but all except one, Hamilton, quit fishing after the MLA's July meeting in Rockland. And even Hamilton "promised he'd do what every other fisherman on Chebeague wanted to do." After this lobsterman continued to haul, Burgess went out to talk to him, but he preferred not to discuss the conversations because of the profanity which might embarrass people. Gignoux instructed him to relate the conversations but omit any vulgarity. "We asked him why he broke his word to the men of Chebeague Island. We asked him why he was hauling, and he said he didn't give a _____ what he got for his lobsters; he could afford to do it for nothing. We thought this was pretty stupid. We allowed that his wife was such a blankety-blank that she made him go out, and we thought we better leave him be."

Government attorneys then turned their attention to Irving Bracy of Port Clyde, described in newspaper accounts as a "rolling-gaited lobsterman in a maroon sweater." He told U.S. Attorney John Galgay, "I love to talk." Bracy characterized the tie-up as "taking a holding turn." When the prosecutor asked him for a clarification Bracy explained: "When you use a winch to hoist a load and you want to stop it at some point, you take a holding turn." But Bracy was as adamant as others that Leslie Dyer had not influenced him to stay ashore. "I'm bullheaded," he said. "I never felt at any time that I wasn't a free agent."

In all, the Government called 29 witnesses for the prosecution, most of whom were lobstermen. Men with names which reflected the quirky independence of lobstermen—Virge Prior, Lester Teal, Irving Bracy, Elmer Alley, Albion Miller—on and on they came. They were all in agreement on the fundamental point that nei-

ther Dyer nor anyone else had told them what to do during the strike. This point was stated most simply by Robert Davis of Port Clyde: "I don't believe you can give a lobsterman any instructions."

In closing arguments, Chief Prosecutor John Galgay cited a letter in which Dyer had written: "Voted to recommend a tie-up of all lobstermen along the coast until a minimum of not less than 35 cents is established." Galgay asked jurors, "How can you, in good

conscience, fail to find on this document alone that Dyer was responsible for bringing about an agreement to fix prices by MLA and to cause a tie-up all along the coast until that price was obtained?"

Alan Grossman, in his closing statement, passionately maintained that when the price dropped to 30 cents, fishermen simply put their catch back in the bank—"God's bank in the Atlantic Ocean." Grossman said the Sherman Anti-Trust law was passed to control giant corporations, not as a means of charging 2600 hard-working men with conspiring. Grossman told the jurors that he could have paraded every one of the MLA's 2600 members before them to look jurors in the eye and say "As God is my witness, I have done no wrong."

The Verdict and Aftermath

The jury returned guilty verdicts on June 4, 1958, against Dyer and the MLA. To judge from the headlines in Boston and Maine papers, people who had followed the trial were stunned.

A week later the sting was taken out of the verdict when fines of \$1000 for Dyer and \$5000 for the MLA were set aside by Judge Gignoux on the recommendation of Government attorneys. Two of the seven indicted lobster dealers who had pled "no contest" to their charges of price-fixing, along with the remaining five dealers, went on trial in August and were convicted and fined.

Out of all the sound and fury of the price war, the strike, the indictment and conviction, the Maine Lobstermen's Association under the helm of Leslie Dyer had become a force to be reckoned with in Augusta, Washington, and on dealers' wharves along the coast. Never again would independent lobstermen be as powerless in the hands of politicians or at the mercy of a few businessmen.

And the price of lobsters never again sank below 35 cents a pound.

Dyer then set about the business of creating lobster co-ops whose members could legally engage in the sorts of activities on which MLA members had been convicted. "It was the judge, really that got the whole thing going, old Judge Gignoux" said Bert Dyer. "He told the old man, 'You guys got a right to do what you're doin', but you got to be organized in a co-op.' Then it was legal; then you could say, 'We'll withhold our lobsters for a better price.' But just by being individuals or association members talking, you and me and three or four of us talking at the fishhouse, 'Hell, I ain't going to sell, let's car them,' then that was price-fixing."

Stanley Tupper, who had served as Maine's Commissioner of Sea and Shore Fisheries from 1953 to 1957 as well as representing Dyer during his trial, urged the MLA to spearhead the co-op movement. In describing his experience in helping to set up the Boothbay Region Fisherman's Cooperative Association in 1949, Tupper wrote, "I will never forget how fishermen of the Boothbay region went into the forest and felled huge trees for pilings for a wharf, rather than use meager funds to buy them. They constructed a building, a landing, and holding cars and further showed their faith by buying shares in

M.L.A. And Dyer To Enter Pleas Of Innocent To All Federal Anti-Trust Violation Charges Friday Morning

their own business. These are acts of rugged individualism and should win admiration of all our citizens."

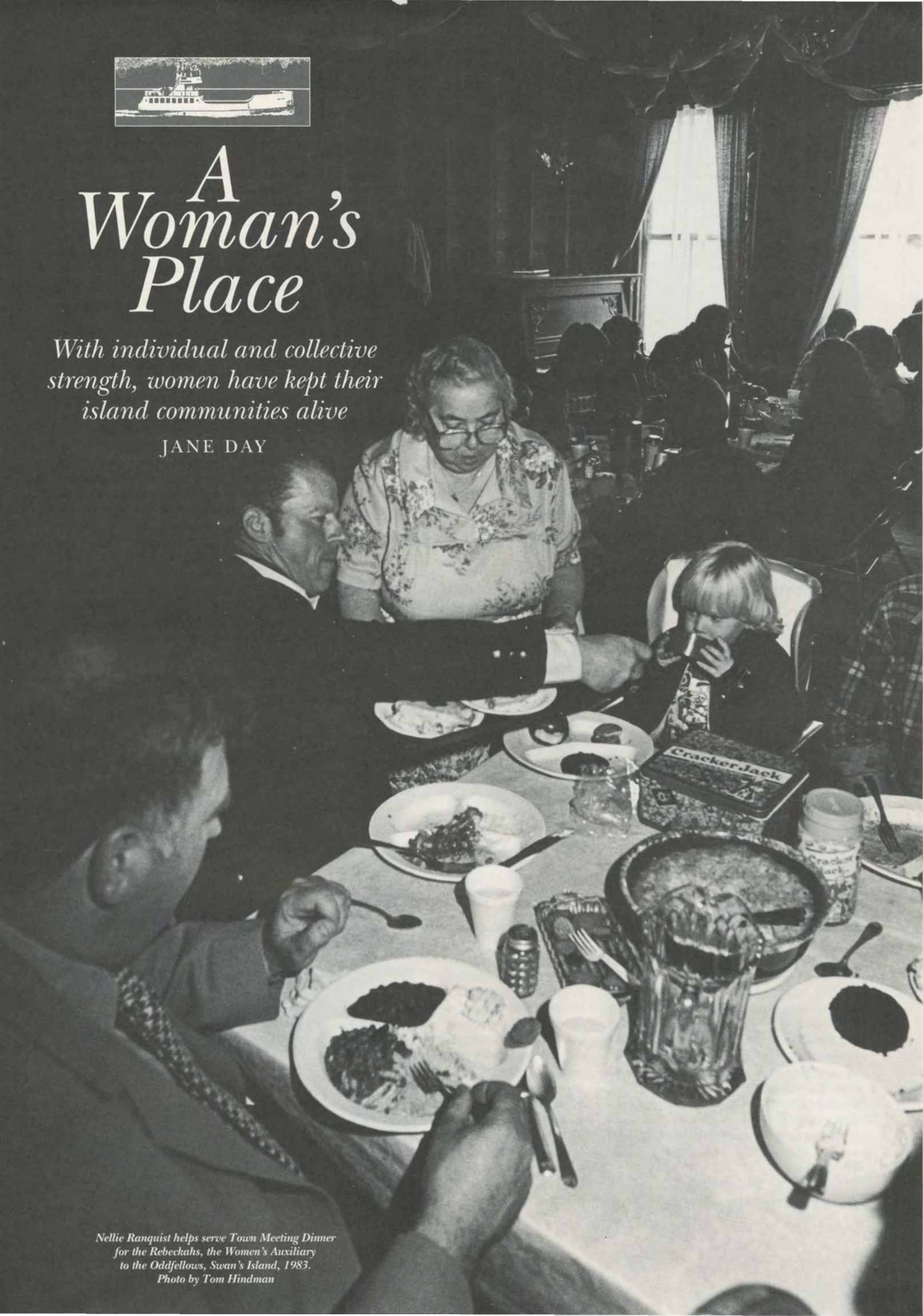
In the ensuing years lobster co-ops were established in dozens of harbors along the coast of Maine in such places as Vinalhaven, Port Clyde, Swan's Island, and Beals, but interestingly not in Casco Bay where Portland dealers remained the dominant influence. The lobster co-op movement is in a sense the continuation of the efforts of lobstermen to influence prices for their own benefit which had originally been unleashed by the bitter events of 1956 and 1957. By banding together in co-ops, lobstermen are able to appropriate some of the benefits (and assume some of the risk) of playing the lobster market. Not all lobstermen have joined co-ops, and not all co-ops have been equally successful, but it is undoubtedly true that thousands of lobstermen's lives have been benefited by the year-end returns of members' shares. The events unleashed by Leslie Dyer and the MLA changed the lobster industry forever.



A Woman's Place

*With individual and collective
strength, women have kept their
island communities alive*

JANE DAY



*Nellie Ranquist helps serve Town Meeting Dinner
for the Rebeckahs, the Women's Auxiliary
to the Oddfellows, Swan's Island, 1983.
Photo by Tom Hindman*



Olga Carleton, Vinalhaven, 1993

"It is my secret belief," one Islesford native recently observed, "that women have always been the backbone of the islands." Although the repercussions of that statement may well rumble through the ranks of husbands, fathers, sons, and lovers with varying degrees of dissent, there is abundant history, both past and present, to confirm the major role women play in holding their island communities together.

THE SOCIAL ELEMENTS integral to island community life—church, school, health councils, libraries, historical societies and Legion auxiliaries, summer festivals, and holiday craft fairs—all thrive largely through the energy, hard work, and creativity of island women. Their role stems from long-established precedent as generation follows generation in perpetuating century-old institutions—and in the process passing on their own women's ways of holding and sharing power. But as a new generation of island women come of age, there are signs that the old patterns may be breaking down, and that traditional roles of community nurturance will express themselves in very different ways. Old orders change, and there are inevitable growing pains as the younger seek their own place in the community.

The livelihood of most families traditionally depended upon the forces of nature. Island men either fished or worked in the quarries—long, physically exhausting hours. Raising the money required to support the church, maintain the community hall, and provide for the needy, fell to the women. Island girls grew up and joined their ranks, eventually to pass their mantle to their own daughters. Pivotal figures in long-standing organizations, primarily church-related, now range from women in their 60s to 80s, and active 90-year old members are not uncommon.

The energy and motivation behind work that raises thousands of dollars is

phenomenal. Personal enjoyment is the basic ingredient that brings women out for weekly meetings all winter long to work on handcrafts for the annual summer fair. "We sew vigorously," says 90-year old Ethel Wardwell of Islesboro, a key member of Islesboro's Second Baptist Sewing Society Inc., a century-old women's organization known locally as the Sewing Circle. At the other end of the island, the Up-island Sewing Circle (officially, the Society for the Preservation of the Free Will Baptist Church) is also sewing vigorously to maintain that historic building.

The established women's organizations on Swan's Island are arms of the Advent Christian, American Baptist, and United Methodist churches. Each has its annual fair when the summer people are on the island to raise money needed to maintain the church, fund charitable missions, and donate to the minister's salary. In addition, they put on several suppers throughout the year. How, one might ask, can a small island population come up with

enough hard-earned cash to support fundraisers for three churches several times a year?" "My goodness, we patronize each other!" exclaims Roberta Joyce, one of the island's spirited elders. "We not only are friends; many of us are related. And we have fun."

Sometimes the energy and initiative mustered to keep these fundraising events going borders on the phenomenal. With a year-round population of about 50, and not enough members to support their island's only church, women of Frenchboro's Congregational Church charter the state ferry to draw a crowd to their annual lobster festival (locally known as "August Dinner") on the second Saturday in August. Last summer, aided by a vigorous advertising campaign and perfect weather, 600 people swarmed onto the island by private boat as well as ferry, and the women raised \$4000.

Although these efforts have been vital to maintaining the social fabric of the community, few women recognize their leadership roles in their organizations as positions of power. It appears more a matter of taking the reins, as one said, "if anything is going to get done." As Swan's Islander Gladys Joyce puts it, "You do not run for things on this island; you run *from* things. Once you get in, they never let you go." A longtime president of the Ladies Aid of the American Baptist Church, she was recently acclaimed Lay Person of the Year on Swan's Island.



Vivian Lunt, Frenchboro, 1993

Peter Ralston (3)



Mary Waterman, North Haven, 1993

From other corners of the bay, island women echo the same refrain. Positions of responsibility are taken on because the work has to get done. Period. On Vinalhaven, Olga Carleton, 69, a trustee of the Union Church, points out that while elsewhere it may be an "esteemed position" to head up an organization with thousands of members, "Here, to keep anything going, you've got to be president."

But the art of doing this is to do it in such a low-key way that the leadership is virtually invisible. Phyllis Colson and Marion Spurling are trustees of the Islesford Congregational Church and hold the reins of the Church Club, a stronghold of the island's older women. Phyllis, soft-spoken leader of the Club, shies from assuming the title of president. "When you're president, you have to be responsible. If there's no president, then everyone is responsible." Although she has headed the Church Club for some years, she refers to herself as the secretary.

On Matinicus, most women belong to what islander Donna Rogers terms "a loose knit" Ladies Aid Society which serves the non-denominational Congregational Church of Matinicus. (If that sounds like a contradiction in terms, recall the words of Matinicus elder statesman Clayton Young: "Out here, the religion is Yankee.") Its dozen or so members meet irregularly to plan the annual Farmers Market they operate twice a week from early July till after Labor Day. More a summer-long craft fair than its name suggests, residents set up tables for their own specialties—needlework, art, books, bread, and jellies. Part of each exhibitor's take goes to support the church. Donna Rogers is a self-taught artist and key player in running the market. She donates watercolors, acrylic and

**"There are two things
that keep a community
alive: the church and the
school. If either went,
it would be the end of
the community."**

Vivian Lunt, Frenchboro

oil paintings, and figures she creates from driftwood she gathers along the shore. No matter how "loose knit," it takes a quantity of work and cooperation by the Ladies Aid to keep the market supplied two days a week for three months. One reason, according to Donna, is that "women out here do a better job of communicating than men. Men have a hard time agreeing. They're so strong-minded, so independent. But you've got to be very strong to live here."

Some backbone roles are more obvious than others. On Frenchboro, Vivian Lunt is the undisputed prime-mover, a role she has held for more than three decades. Up until last year, when she "retired" at age 77, she had been a member of the school board for 31 years, treasurer of the Congregational Church for the same period, and has been president of the Historical Society since the day it was organized. Every day from June through October, Vivian works as volunteer curator at the Society's museum from noon to 7 p.m. She is usually accompanied by her sister, Lillian Lunt (they married brothers) who also tends the adjoining library. And she continues to do the books and

make out the payroll every week for Lunt and Lunt Lobsters, a family business.

Descended from one of Frenchboro's original 18th Century settlers, Vivian Lunt almost singlehandedly has kept her island history alive. She is the author of *The History of Frenchboro*, published in 1970, and a pictorial history, *Frenchboro: The First 100 Years*, published in 1980 and being reprinted by Down East Graphics.

"I enjoy it," is Vivian's response to the question of why she has kept up the effort all these long years. But she quickly adds, in a more serious vein, "Somebody's got to do it." The community would die, she feels, "if no one picked it up."

"There are two things that keep a community alive: the church and the school. If either went, it would be the end of the community." For Vivian, church work is not primarily a matter of piety but a commitment to community life. "You need the church in a community," she says firmly. "To lose it would be tragic."

While island women have traditionally exercised their power through the church and other social institutions, they also have an independent streak, and early on—well before the era of feminism—broke barriers in territories traditionally occupied by men. Again, however, this has been not so much out of choice as out of necessity.

Olga Carleton broke ground that hadn't been turned since the Great Depression when she was elected to the Vinalhaven Board of Selectmen in 1971, the first woman member in 40 years. She has had her hand in just about every other town office since—eight years on the school board, eight years as cemetery trustee, 11 years as assessor, and a current member of the planning board. Olga doesn't hesitate to take up the challenge of leadership, or express opinions that might run counter to others. Her stand on the state's mandate for a free school lunch program is a case in point. "There are enough people in this town who know how to cook without putting it on the taxpayers."

Age fails to impede the vitality and output of women who hold responsible jobs in island communities. As town clerk of Islesford for the past 32 years, Irene Bartlett's own life is a model example. A vigorous octogenarian, she first took office as town clerk in 1930, a year after she was married, and had the job off and on for the next 30 years. She's held the office consecutively since then, working fulltime out of her home. In addition to Islesford, her domain encompasses Great Cranberry, Sutton, Baker, and Bear islands. When her husband, Frank Bartlett, died in 1969, she carried on his construction business, kept the books, paid the crew, even "painted some, but no nail-pounding." She has

four children, one of whom, Francis, is Islesford town treasurer and tax collector. "Women are not tied to the kitchen on islands. Never!" Irene Bartlett couldn't sound more emphatic.

Irene's counterpart on North Haven is Mary Waterman, town treasurer for the past 30 years. Mary handles the money and pays the bills. She collects excise and other taxes, registers cars and boats, and is treasurer for the water and sewer departments among others. She says the job gets bigger every day. "It used to take three days to get ready for the auditor. Now it takes three weeks." Every year at town meeting she runs unopposed for reelection. "I enjoy it," is how she sums up her job.

On Swan's Island, Roberta Joyce pioneered as the first woman on both the Board of Selectmen and the School Board, the latter for nine years—"things like that are good for the brain." She's now a board member and summer volunteer of the Swan's Island Educational Society and Seaside Hall Museum. And like most the older generation of island women, she is actively involved in her church. Roberta is an alternate pianist at the Advent Christian Church, and also plays at a half-hour songtime before service with a son who plays saxophone and a grandson on guitar. She clearly follows her own advice—"Keep active. Too many hit the rocking chair too early."

But while independence has long been an established tradition for island women, there is evidence that the older institutions of influence are losing some of their sway as a new generation of island women are finding their personal sense of belonging through different channels. The divergence is largely generational. It troubles Bernice Sprague, president of the United Methodist Women on Swan's Island, that the burden of supporting the church is borne largely by older members. "Without our work, churches would fall." But younger women, busy raising their families, are more likely to be found teaching Sunday School than in the sewing circles. And, too, young women voice concern that their elders "want us to take over as is." When several tried to initiate a coffee hour after service, few older women came.

Candi Joyce (daughter-in-law of Roberta) is superintendent of the Advent Christian Church Sunday School in Minturn and one of Swan's most involved younger women. She sees women, particularly those in the church organizations, divided into two groups: "The older ones wonder why the younger don't come to church, and the younger women wonder if the older will let them come in. But they should become involved, and they will begin to feel that it is not always true."

Like her husband Matt, Candi is descended from one of the original settlers. But she was born in Rockland and went to school there—"they won't let me be a native," she says half-jesting. Like many young women with children—her two are 11 and 8—Candi opted for a seat on the school board, which she now chairs. She likes being on the board and the opportunity it affords to work with teachers in the island's multi-graded school. She finds the teachers work well together and have been there a long time. "From the day children are born, the teachers know them, and the kids know the teachers. They don't feel strange going to school." But being a board member involves some painful decisions. "The teachers are your friends. It's hard when you're sitting there eyeball to eyeball and

**"When we grew up,
we saw a need
and helped fill it."**

Katie Quinn, North Haven

telling them whether they can have a raise."

From around the other islands, we begin to see a picture of a new generation of community-minded women. Some, like Candi, maintain a deep involvement in the church, the traditional domain of influence. But more and more women are finding their metier in the schools, and in occupations which provide an outlet for their professional training and competence. The ranks of long-established women's organizations are thinning, not so much because the work they do has lost its purpose, but because of a new generation's change of focus. Young island women often juggle the demands of home, children, and job. They tend to become involved in community organizations that relate to these interests—school boards, day care centers, health councils, and community centers.

On North Haven, Candy Brown agrees that times are changing, but opportunities for service remain a constant of island life. "We grew up in a big family—11 kids—and are used to crowds. We like to volunteer. We believe it is important." That's how she explains why she and her sister, Katie Quinn, are so involved in community life. Candy, whose husband James is a fourth-generation member of the island's J.O. Brown Boat Yard, is president of the North Haven Baptist Church and a deaconess. For the past 18 years she has been vice-superintendent of the Sunday School, as well as a stalwart teacher there. She's also a member of the

Grange and on the island Recreation Council.

Almost every child on the island goes to Sunday School from age three to 14, but Candy says the church has not been able to get the young parents involved. "Younger women are going in different directions, and a lot of them work. "Some are taking ITV courses from the University of Maine at Augusta, and Candy herself is working for an associate degree through the program so that she can become a teacher.

Candy's sister Katie also is active in community work, and her busy schedule of volunteering reflects the growing pattern of today's island women, melding traditional service organizations with new opportunities made possible by her own professional skills. Katie is superintendent of the Sunday School and teaches a preschool class. She volunteers at the school library during the winter, and for the past 15 or so years has been the librarian at the North Haven Public Library which is open six days a week during the summer. Trained as an X-ray technologist at Eastern Maine Medical in Bangor, she is also on the Health Council, a member of the American Legion Auxiliary, and helps with the AFS foreign exchange program and athletic events at the North Haven Community School. She attributes her community-mindedness to her island upbringing in a large family. "When we grew up, we saw a need and helped fill it. You have to keep it viable. If you don't, these things just fade into nothingness."

And that, of course, is the deepest fear—particularly in a tiny outpost like Frenchboro, where the specter of "things fading into nothingness" has been met by the determined efforts of Vivian, Lillian, and other women of her generation to maintain the fabric of community life. Vivian admits that the new generation of island women are preoccupied with young families. "But we're grooming them," she says. She points to last year's August Dinner, where she relinquished her longstanding role as overseer to allow others to learn the part. "There's a time coming when we won't be able to do it anymore," she says. "They need to get used to it while we're still around to help."

Modes of expression may change with the times. But whatever their age or interest, today's island women hold the same devotion to their islandness, a shared love of place. The natural beauty, the freedom to simply be, the security of a community that looks after its own. These are the qualities that island women through their individual and collective strengths keep alive.

Jane Day is a freelance writer from Camden, Maine, and a frequent contributor to Island Institute publications.



Brima Davis



Mary Hutchinson

A Shared Love of Place

*Portraits from
Matinicus, Isle au Haut,
Stonington, and
York Island*

JEFF DWORSKY



Rose Gove, Mary Hutchinson, Joyce Bray



Alice Haskell (bride) and Starr Dorr



Tina Torrey



Edna and Steve Gray



Wanda Philbrook



Brimna and Zephyr

The people know that the good things I will give you in
the future. I will give you the best of my life and my
heart. I will give you the best of my love and my
strength. I will give you the best of my hope and my
faith. I will give you the best of my courage and my
bravery. I will give you the best of my wisdom and my
knowledge. I will give you the best of my peace and my
joy. I will give you the best of my life and my
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bravery. I will give you the best of my wisdom and my
knowledge. I will give you the best of my peace and my
joy. I will give you the best of my life and my
future.



*Few people know that the poet Robert Lowell spent parts of 10 summers in Castine, Maine, between 1955 and 1965 with his wife Elizabeth and daughter Harriet. A number of poems in Lowell's books *Life Studies* and *For the Union Dead* are influenced by the imagery and people he met on the Maine coast.*

*For a personal memoir of Lowell's time in Maine, readers might wish to refer to "Summers in Castine, Contact Prints: 1955-1965" by Philip Booth, which appeared in *Salmagundi* (Spring 1977), a quarterly of the Humanities and Social Sciences published by Skidmore College.*



Peter Ralston

W A T E R

ROBERT LOWELL

It was a Maine lobster town—
each morning boatloads of hands
pushed off for granite
quarries on the islands,

and left dozens of bleak
white frame houses stuck
like oyster shells
on a hill of rock,

and below us, the sea lapped
the raw little match-stick
mazes of a weir,
where the fish for bait were trapped.

Remember? We sat on a slab of rock.
From this distance in time, it seems the color
of iris, rotting and turning purpler,

but it was only
the usual gray rock
turning the usual green
when drenched by the sea.

The sea drenched the rock
at our feet all day,
and kept tearing away
flake after flake.

One night you dreamed
you were a mermaid clinging to a wharf-pile,
and trying to pull
off the barnacles with your hands.

We wished our two souls
might return like gulls
to the rock. In the end,
the water was too cold for us.

"Water" from FOR THE UNION DEAD by Robert Lowell.
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Monhegan
Headland,
Reuben Tam,
1968

The Art of Island Maine

*Maine islands have been havens of
diversity in the post-war art world*

EDGAR ALLEN BEEM

WHEN PAINTER Reuben Tam died on the Hawaiian island of Kauai in January 1991, artist Alan Gussow, Tam's summer neighbor on the Maine island of Monhegan, set about carving a set of nine pukamani poles in Tam's honor. Inspired by the totems that the aboriginal Tiwi tribe of Australia carve to commemorate their dead, Gussow's pukamani poles ranged in length from two to 12 feet and encoded on their carved surfaces symbols of the artist's life and loves. On August 31, 1991, the poles were ferried to Monhegan from the mainland and were installed outside Tam's cottage in a ceremony attended by dozens of Tam's friends. Artists and islanders alike sang songs, told stories, and together marked the passing into history of another bright soul of the summer art colony.

Monumental and mercurial, moody Monhegan has been attracting artists to its stony shores since the 19th century and has been an established art colony since the early years of this century. It numbers among its hallowed dead such great American artists as Robert Henri, George Bellows, Edward Hopper, and Rockwell Kent. Monhegan is truly the premier art island of Maine, but it is not the only one.

In a state rich with art history, Maine's islands have proven to be both haven and holy land to generations of artists. In the beginning, they came for the scenery—raw landscapes still being sculpted by the hands of God and Nature; but increasingly in the supersonic age Maine islands became a source of sanctuary—places where human life achieved dramatic focus as it was lived in isolation and open to the elements.



Since World War II, as wave after wave of "ism" has swept over American art, Maine islands have provided safe harbors to independent artists fleeing the orthodoxy of the day. And they have made both their art and these islands their own.

ON THE EDGE OF THE WORLD

"Islands, by definition," wrote Alan Gussow in his landmark *A Sense of Place—The Artist and the American Land*, "are places unto themselves, but Monhegan is also a place within me—finite, singular, entire."

Alan Gussow first came to Monhegan in 1949, just one year after Reuben Tam arrived. Where the poetic Tam was drawn to the bold headlands, far horizons, and sweeping vistas off the island, Gussow, an environmentalist as well as an artist, has more often found his island inspirations in the rockweed and tidal pools of the littoral zone.

"For all the distances one sees on Monhegan," Gussow says, "I have this feeling of locating things at my feet." The sea, the sky, and the island light are constantly changing, he notes, "but the rocks have really been immutable."

A strong naturalistic strain has run through the rock-hard realism of Monhegan art from Rockwell Kent on down through marine and landscape painters such as Jay Hall Connaway, Andrew Winter, James Fitzgerald and Don Stone. But having been colonized primarily by New York artists, Monhegan was also one of the few places along the coast of Maine where serious abstract and expressionist art took hold.

Abstraction is an urban impulse, an internalizing of experience beyond perception. In the paintings of the late Michael Loew, for instance, Monhegan is

all but unrecognizable, the light and forms of the island having been transformed into a geometry of pure color. Hyde Solomon, Murray Hantman, and William McCartin are among the other accomplished painters who have rendered the island abstract. But if one knows how to look or what to look for, a place as powerfully real as Monhegan is sure to leave its traces. Such is the case with the Monhegan art of William Manning.

Bill Manning, a Portland artist who paints on Monhegan each summer, creates elaborate, constructed paintings which are essentially idealizations of natural phenomena. His abstract lines and shapes and shadings, beautiful even without appeal to nature, are like the residue of reality, the evanescent line and light of cloud shadows, ocean currents and the contrails of jets heading out over the North Atlantic. One would think Manning could find source material anywhere, yet Monhegan remains the foundation of his art.

"It's like church to me," says Manning of Monhegan. "It's a very mystical feeling. I just have to go there."

The expressionist urge is driven by emotional needs, characterized by the free use of color and best made manifest in the human figure. The actor and artist Zero Mostel, for instance, was a colorful Monhegan summer resident who often starred in his own Picasso-esque compositions. And John Hultberg, one of the New York art stars of the 1950s, brought his own surreal vision with him when he arrived on Monhegan in 1962. Hultberg is a painter of apocalypse and decay and he loads his brush with torment.

Other painters on Monhegan of an expressionist bent trade in high-keyed color without Hultberg's sense of existen-

"Monhegan is like church to me. It's a very mystical feeling. I just have to go there."



Off Teel's Island,
Andrew Wyeth, 1944

For all the peace and freedom he finds on Cranberry, Little believes, however, that “an element of fear” enters quietly, darkly into island art, island life.

tial angst. Lynn Drexler, Hans Moller, and Elena Jahn all treat the island to colors it has never worn, but they do so out of excitement rather than anguish. But perhaps the most soulful and individualistic painter to work on Monhegan in modern times was Joseph DeMartini. Described by his friend Bill McCartin as “a man of great simplicity and honesty,” DeMartini painted a lonely, human universe from his rented studio on Fish Beach and he did so, most often, in somber tones of black and white and gray.

One island, many realities. Currently, the most popular version of Monhegan is painted by Jamie Wyeth, son of Andrew Wyeth and grandson of N.C. Wyeth. Living and working in a house built by Rockwell Kent, Wyeth paints a gothic Monhegan, both beautiful and strange. He has inherited the Wyeth narrative gift, the ability to transform the everyday into the extraordinary. Wyeth’s portraits of island boy Orca Bates, for example, capture the native wildness of both the island and the islander.

“Orca is a true island child—at home with gulls, rocks and seaweed,” Wyeth has said. “He was born on Manana, the treeless rock behind him. He belongs to it; he is part of that place.”

Becoming part of Monhegan has become increasingly difficult for artists as the island’s popularity (and therefore its

real estate values and rental fees) increases. To give more artists exposure to its rare, deep sea beauties, fiber artist Robert Semple turned his Monhegan cottage, Carina House, over to the Farnsworth Museum in Rockland to administer as an artists’ retreat. Marguerite Robichaux, a painter from the Carrabassett Valley in

Cathedral Woods,
Marguerite Robichaux,
1990





Hurricane Island and Beyond,
William Kienbusch,
1963

western Maine who spent six weeks at Carina House in 1990, says she has returned on her own each summer since. Such is the magnetism of Monhegan.

"I live in woods of Maine for my solitude," says Robichaux, "but I am drawn to the edges of the world, and Monhegan is definitely an edge of the world."

PEACEABLE SHORES

"One of the great moments being on an island," says painter David Little, "is that brief interval when you're on the edge of the woods, the light coming through, then you step out onto the shore and it's in your face."

David Little is a second-generation artist on Great Cranberry Island just off Mount Desert. Great Cranberry is a charmed, often overlooked island, not so dramatic as Monhegan, but in its tranquillity and repose just as attractive to artists. Little inherited his cottage on the island from his uncle William Kienbusch, perhaps the most forceful abstract painter to work the peaceable shores of Maine.

In many ways the Cranberry Isles are charmed places, intimate and overgrown now that sheep and farming no longer keep the land open, but facing the mountains of Mount Desert, they own some of the best views in Maine. Artists are not so numerous on Cranberry as deer, but those who come are often bound in tight little coteries of friendship and family.

The first artist on the island was printmaker Charles Wadsworth, a conscientious objector during World War II who came to the Cranberries in 1946 to escape a world in turmoil. When he reported the serenity of Great Cranberry to friends back in New York, several artists who had studied with Wadsworth

at the innovative American Peoples School retreated to the island as well, among them Gretna Campbell, Carl Nelson, and John Heliker.

Heliker, now the grand old man of Cranberry, is a master of the gentle impressionist landscape, painting intimate views of island gardens and interiors that speak of civility and the cultured life. He shares his Cranberry farmhouse with painter Robert LaHotan, an artist more apt to paint studio still-lives than island landscapes, but LaHotan credits his time on the island with being a creative catalyst.

"Being here," LaHotan has said of Cranberry, "releases a lot of memories of other places even if I'm not painting the island."

In like manner, William Kienbusch used to refer to the trek from New York to the Cranberries as "climbing Mt. Everest." It was a trip downeast he made in stages, stopping off in places like Portland to decompress from urban pressures so that by the time he reached far Cranberry he was so psyched up he'd set to work immediately recording vivid impressions of subtle island phenomena such as the sound of a gong buoy or a glimpse of the sea in vigorous, abstract strokes.

Where Kienbusch reacted to Cranberry with an excited eye, his nephew David Little conveys a deep sense of the island's stillness and calm in his delicate landscapes. For all the peace and freedom Little finds on Cranberry, however, he also believes that "an element of fear" enters quietly, darkly into island art, island life. This fear is a function of the heightened awareness of isolation and vulnerability one feels on an island, but it is also part of the beauty of the place.

Another of the Cranberry Isle connections is Cooper Union art school in New

An island, by its very nature, focuses one's attention, limits the cast world to a manageable few acres where close inspection and introspection are rewarded.



*Interior with
Clam Diggers,*
John Heliker,
1986

York City, where island artists Gretna Campbell, her son Henry Finkelstein, Finkelstein's wife Carleen LeVander, Ashley Bryan, Emily Nelligan, and her husband Marvin Bileck all studied. Though this common aesthetic bond imparted no particular artistic point of view, Henry Finkelstein had followed in his late mother's footsteps, painting closed Cranberry landscapes in vibrant colors and flashing strokes.

Emily Nelligan, on the other hand, has been an almost ghostly presence on the island, haunting the tidal marsh at Fish Point in fog and at first and last light to

create exquisite charcoal drawings that reduce Cranberry to its absolute simplest terms. It is remarkable that someone who spends so little time on the island is capable of experiencing it so deeply.

In truth and in fact, of course, most of the artists who work on Maine islands are summer visitors. Of the Cranberry artists, only illustrator Ashley Bryan is a year-round resident. More rare still on Maine islands are native artists. Indeed, Eric Hopkins of North Haven may well be the only native Maine island artist of real distinction.

North Haven is a summer enclave of old Boston families, and the vast majority of the island land is now in out-of-state hands. Eric Hopkins, however, owns the landscape. His sweeping, purified aerial and marine views of North Haven and the neighboring islands of Penobscot Bay possess a kind of cosmic charm, their tilting vistas and arcing horizons politely reminding viewers that Vacationland Maine, for all its earthly beauty, is but a fleck in a vast, mysterious universe.

Just fathoming the mysteries of a Maine summer colony proves too much for most artists, it seems. Neither North Haven nor Islesboro have incubated much in the way of modern art. Islesboro, with its aristocratic Dark Harbor resort community, is Maine's society island, and most of the artists who work there are related to one another.

Brita Holmquist has absorbed the natural rhythms of the island and the bay into her sunny, felicitous paintings, but for many years she painted nothing but the garden view from the porch of her family's Dark Harbor summer estate. Brita is the daughter of painter Ibbie Holmquist, and from time to time several members of the Holmquist clan have exhibited together.

Spring Islands,
Eric Hopkins,
1988





Cold Ruffles II,
Brita Holmquist,
1989

er at the Islesboro Historical Society. The present younger generation includes Ian Kats, Bayard Hollins, and Joshua Outerbridge.

The most accomplished outsiders who have painted Islesboro in recent years are Hearne Pardee and Gina Werfel. Husband and wife, Pardee and Werfel are latter-day Fauves who paint dashing landscapes that are as much about the act of painting as about the act of seeing or anything seen. In this, they are aesthetic kin to Henry Finkelstein, who is represented by the same New York Gallery as Werfel. In the small, tight world that is Maine island art, therefore, it is not surprising to find that Werfel and Pardee have also spent time painting on fair Cranberry.

THE WORK OF ART IS THE SEARCH FOR MEANING

To find real mavericks on the Maine art scene you have to travel to a working island: the harsh, unlovely, quarry-pocked, magnificent island of Vinalhaven to be exact. Vinalhaven is a hardscrabble, make-do place and the artists who work there are something like hermit crabs, seeking shelter in the abandoned. The

most noted of these island exiles is Robert Indiana.

Robert Indiana, one of the stars of Pop Art in the 1960s, first came to Vinalhaven in 1969 at the invitation of photographer Eliot Elisophon and since 1978 had made his permanent home in the former Star of Hope Oddfellows Hall. Famous for his LOVE paintings and sculptures, Indiana is an artist who deals in signs and symbols, so Vinalhaven manifests itself in his work in emblematic rather than visual ways.

His greatest achievement since moving to the island has been Indiana's "Hartley Elegies," a series of paintings and silk-screen prints made in homage to Marsden Hartley. Hartley, a Lewiston native who became one of the giants of modernism, spent the summer of 1938 on Vinalhaven, but Indiana's "Hartley Elegies" are based on the symbolic paintings Hartley did during World War I to memorialize a fallen German officer friend.

During the 1980s, Vinalhaven became something of a printmaking mecca after Pat Nick rented the former island schoolhouse and installed her Vinalhaven Press there. Indiana was one of the first artists to make prints at the press, but the Vinalhaven Press's chief *modus operandi* has been to entice established and emerging artists up from New York with the prospect of a summer escape to a Maine island. While on the island, the artists execute prints in collaboration with master printmakers, and then Nick markets them during the winter back in New York.

Through the Vinalhaven Press has no overriding look or style, the artists Nick has hand-picked have tended to be tough-minded individuals with gritty aesthetics that fit the nature of the island. Among the artists who have worked at the press are islanders Indiana, Peter Bodnar, and Carolyn Brady, and outsiders Louisa Chase, Susan Crile, Robert Cummin, Leon Golub, Charles Hewitt, Robert Morris, and the Russian émigré team of Komar & Melamid. Charlie Hewitt, an Auburn, Maine native, has also teamed up with two other outstanding Maine artists who summer on Vinalhaven, Alison Hildreth and Katerina Weslien, to make prints independently.

Another refugee from the mainland art wars is Tom Lieber, a California painter who first came to Vinalhaven to visit artists George Bartko and Peter Bodnar. Lieber fell in love with the island and now paints summers in what once was the Vinalhaven Knights of Pythias ballroom.

Lieber's abstract paintings merge elements of the human figure and elements of nature into luminous internal landscapes that have an aura of spirituality about them.

"Being in the middle of the Atlantic Ocean is a real cleansing experience for me," says Lieber. "Just being on the water, seeing the reflections come into my head through my eyes, is an education for me.

Hopkins' sweeping aerial views of North Haven and the neighboring islands possess a kind of cosmic charm, their tilting vistas and arcing horizons politely reminding viewers that Vacationland Maine is but a fleck in a vast, mysterious universe.



Decade
Autoportrait,
 Robert Indiana,
 1982

The fact that I'm on an island surrounded by water, even though there's solid ground beneath my feet, has a certain quality of vastness that enters into my work, making it more special."

The island experience is one of both physical and psychic removal, as painter Larry Hayden learned in 1979 when he moved out to Peaks Island. Peaks is a blue-collar island just a short ferry commute from downtown Portland, and during the 1970s and 1980s several artists—among them Ellen Gutenkunst, Hayden, Biff Higgison, Richard Hutchins, Chake Kavookjian, Patrick Plourde, and Claudia Whitman—moved there, attracted by the beauty and the low rents.

When Hayden arrived on Peaks he was a landscape painter, but he found that

"the safety of the island" allowed him to relax, open up, and make a successful transition to abstraction. Last year, Hayden moved off the island after 13 years, feeling that he had absorbed what the place had to teach.

"I came to see the water as a moat," says Hayden, "and the whole move to the island as a spiritual journey."

All good art is a search for meaning. What artists find on Maine's island depends not only on what they are looking for—privacy, inspiration, natural beauty, society—but also on the sensibility of the artist and the character of the island. Perhaps the most privileged island experience is reserved for those who inhabit private islands or own one of their own.

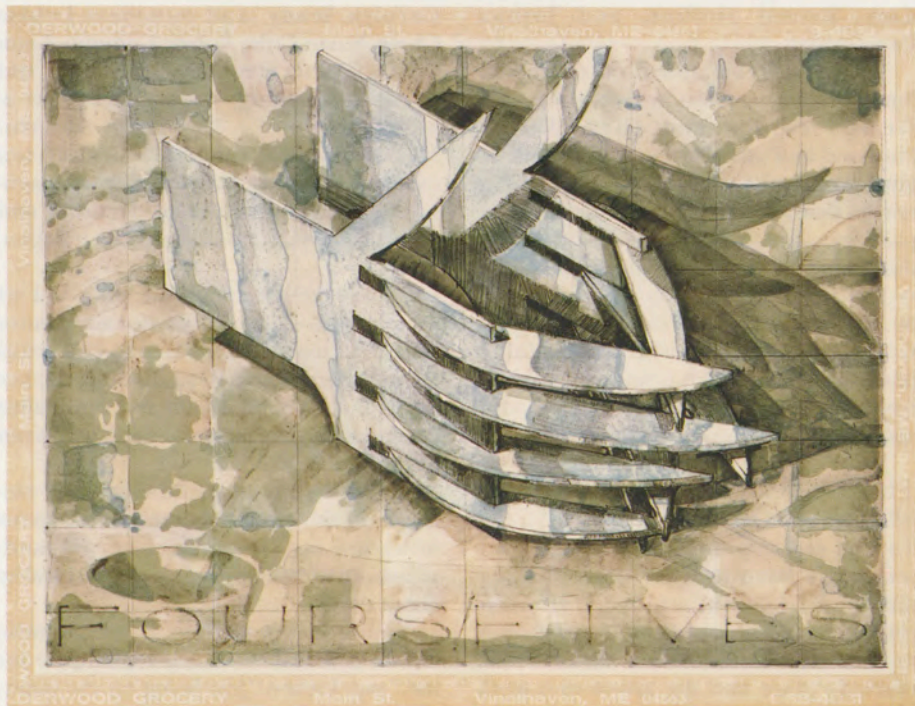
David Rowe, one of New York's rising stars, for example, has summured on Cushing's Island in Casco Bay since boyhood, his intellectual abstractions drawing some of their clarity from the quality of Maine light.

And Andrew Wyeth, while more closely associated with the mainland town of Cushing, has created paintings of sublime beauty and eeriness on Allen Island, the historic island he owns with his wife Betsy.

Perhaps the most lovingly celebrated of Maine's private islands, however, is Great Spruce Head in the bright heart of Penobscot Bay. The summer retreat of the Porter family of Winnetka, Illinois, Great Spruce Head was painted by Fairfield Porter and photographed by his brother Eliot throughout much of the mid-20th century.

A painterly realist in love with the French Intimists, Fairfield Porter painted the family summer life of Great Spruce Head in sure, sunny tones that make of

Fours/Fives,
 Robert Cumming,
 1987





The Dock,
Fairfield Porter,
1974-5

the island a kind of saltwater Eden. Commenting on one of his island paintings in Alan Gussow's *A Sense of Place*, Porter observed that the most important aspect of a place is "the quality of love."

"Love," wrote Fairfield Porter, "means paying very close attention to something, and you can only pay close attention to something because you can't help doing so."

An island, by its very nature, focuses one's attention, limits the cast world to a manageable few acres where close inspection and introspection is rewarded. Eliot Porter, whose 1966 appreciation of Great Spruce Head, *Summer Island*, remains one of the great books on the Maine island experience, credited the island with making him both a naturalist and a photographer—an artist.

"So it was that we began to live by lunar time," wrote Porter of his boyhood explorations of Great Spruce Head's shores. "A deep feeling for nature began to grow in me, a feeling that was to affect the whole future course of my life."

Talk to any artist who has worked on a Maine island, view the evidence of their art, and it becomes clear that island life, island time, is a powerful tonic, a transformational experience that re-charges creative energies and uplifts the human soul. For what time spent on a Maine island ultimately affords the mortal mind and eye is a rare comprehension of wholeness.

Reuben Tam, writing in his journal on June 2, 1965, expressed this perception more poetically. And it is well to end as

one begins: "And today," wrote Tam, "a day of cold, of drizzle, of the sea fog blowing in and the cold wind hurling the north onto the land, the utter desolation of time, and of gray air and gray light, the fog horn sounding over the island—the aloneness of living itself—these, the sea, and the high cliffs on the other side of the island, and the presence of spruce trees denoting the north, make me realize, if only sporadically, that I have found much of what I have searched for here on Monhegan."

Edgar Allen Beem is the art critic for the weekly newspaper *Maine Times*. In 1990, a selection from his writings was published as *Maine Art Now*.

The paintings accompanying this piece are all from our Rockland neighbors, the William A. Farnsworth Library and Art Museum. This summer the Farnsworth's leading exhibition will be a major showing of Jamie Wyeth's island paintings, a show which will recall the Jamie Wyeth Folio in Volume Eight of *Island Journal*. Concurrent with the Wyeth show will be an exhibition of other island paintings from the Museum's collection including those which appear here.



Mike and Gene Robinson watching Herbie Rich and Bud Robinson build the JOANIE B, 1966

Joan Robinson

GROWING UP ON CHEBEAGUE

An interview with Donna Miller Damon

DAVID D. PLATT



Donna Miller Damon

Donna Miller Damon grew up on Chebeague Island in Casco Bay in the 1950s, leaving home for the mainland as a teenager to attend school. She still lives on Chebeague where she is active in community affairs. Donna is also a trustee of the Island Institute. Last winter, for Island Journal writer David D. Platt, she recalled some of the events of her childhood.

I WAS BORN IN 1950. Both my parents were born on the island, and that was typical of most of the time that I was growing up there. With the exception of the influx of soldiers who married island girls during the war, I was related to most of the people on the island and all of the children I went to school with. The economy was island-based, no question. The transportation to the mainland hadn't changed since the turn of the century—four ferries to Portland a day—and commuting at that point had not caught on.

“People earned their livings then by lobstering and fishing and clamming. It used to be that fishermen worked all year round. When I was little, my father would go outside trawling and go to Jeffries, Cashes Ledge. He kept his traps off all winter and hauled when the weather was

good. Sometimes you'd go two weeks and the weather wouldn't be good. He'd go clamming when he could—my father used to take his clams to town and sell them around to the fireboats and the gas company. He had all these different clients, and he could hardly get off the boat and the clams would all be gone. He sold his clams for \$1.50 a quart in mayonnaise jars. You know, a quart of blacked clams for \$1.50 was a pretty good deal.

“The boats they had were pretty large, maybe 40 feet. Usually a couple of people went. They would bait their own trawls on mussels or frozen cut up mackerel or whatever and they would rig the trawls in their kitchens as they had done 100 years before. But after groundfishing declined there wasn't much chance for people to make much of a living. My father probably got out [of groundfishing] in the early '60s.”

Could you describe the school you attended?

“When I started school in 1955, the school on Chebeague was K-12. There were 24 children in the room—nine of us in sub-primary, as they called it then, through fourth grade. The teacher was



Jasper Smith pulling Mike Robinson, winter 1961-62

Joan Robinson

The difference between Chebeague and the mainland is greater now because the mainland has changed so much.

very strict. If you went a whole week without whispering, you got a star on the board. She grouped a little bit, but she taught to the top of the class. A lot of the time some of the kids just couldn't keep up. It was a very difficult situation. She really cared about what she was doing, but they didn't have special education, any training in understanding that kind of thing, and so there were a lot of children who grew up having reading problems...

"The year I started was the last year there was a high school on Chebeague. My sister had graduated the spring before—I think she had six in her class—that would have been the class of '55. The class of '56 had only one, and several families had started moving to the mainland for the winter so that their kids could go to high school because they were concerned about the kind of education they were getting. The primary reason they closed the high school was that the superintendent at the time was looking at the overall picture and it was impossible to get anybody to teach who would have the skills to prepare them for the "rocket science" world. People hated it. There was no consensus that this was a good idea.

"At first our high schoolers were sent to Portland High School. But then, since Chebeague is part of the Cumberland school system, the school board decided if we were going to send them anywhere, why don't we send them to Greely in Cumberland? So they started bringing them on the Casco Bay boat to Portland and then driving them out to Greely, which was a long trip. Someone got the idea of going across to Cousins Island—that was in the early '60s. I went to school through Cousins Island."

How did your school experience compare with that of others on the mainland?

"Not having had a lot of preparation for what it was going to be like on the mainland, it was difficult to start out. During the first week I dropped books overboard. How do you go to a teacher and say I dropped books overboard? Some of the teachers were very sympathetic, but other ones couldn't understand the unique problems associated with island living.

"We didn't have any kind of a structure for being in extracurricular activities. My twin cousins played baseball and would walk or hitchhike to Cousins Island, borrow a punt, and row home after a game. There were a couple of teachers who lived in Yarmouth, and if I called them they'd come and pick me up and give me a ride—and I found there were individual teachers and coaches who would take an interest in me, and they would bring me down to the boat, and that really could make a difference. Island parents and their children are unable to share traditional rites of passage such as prom night, etc. Someone else's parents take the prom pictures and wait up to share the memories. My parents missed so much—athletic events, plays. Once the principal arranged to have my parents surprise me at my National Honor Society induction. It meant a lot."

Up to the time you went to the mainland for school, what was your social life like? Was it different from what your friends on the mainland had?

"It probably was. When we were little, most of the things that we did revolved around the church. Everybody went to Sunday School. Even as teenagers we'd go

to Sunday School for something to do. We had choir rehearsal one night a week, and youth fellowship was on another night, and we had Sunday School on Sunday night. The Sunday School teacher would sometimes make turkey dinners and take us on a picnic. It gave us a structure for social life. Groups of us would go to the other islands on picnics. We spent hours combing the beach and exploring the woods.

"Once in a while they'd rent a movie, and everybody would go. They had suppers, and everybody would go to the suppers...when we were little we learned to wait on tables. We were conditioned into a role of community service, which is what perpetuates these kinds of things.

"Ever hear of a devil's fiddle? It was something we kids used to do—at night we'd take a trap nail and nail it up under a clapboard on a house. We'd tie some Aunt Lydia's thread to it, run out into the woods, and then pull it tight. If we rubbed it with rosin it would make this sound, vibrate the whole house. People would come out and try to find out where the sound was coming from. We did it to the minister once, but he knew what it was. We did it to people renting houses, and they'd wonder what was going on. The sound would be high or low, depending on the length of the string. Kids did other things too, like catching dogfish and putting them under people's porches."

Chebeague has had regular boat service to Portland for a century, but now there's additional service via Cousins Island and Yarmouth. Was the school arrangement responsible for this change?

"When they negotiated with Greely to send the kids there instead of Portland

The summer people had dances where everybody wore white gloves and gowns and carried their shoes in little bags. Meanwhile the island people would go to the Hall and square dance.

High, there were a few people who were running water taxis, taking a few people...there was a man on Littlejohn, Harold Sawyer, who was doing it, as well as Jasper Smith and Clyde Bowen on Chebeague.

"The town of Cumberland hired a man named Kip Homan who ran a school boat, the GLORIANNA, which was completely unrelated to any of these other water taxis. He was commissioned to take the kids back and forth. He really cared about the kids. He would run a special boat for the kids to go to a dance.

"It was Jasper Smith's operation that eventually became the Chebeague Transportation Company. Eventually, when Kip Homan decided he wasn't going to do it any more, then Jasper Smith bid for the school contract. He had it for a couple of years before Chebeague Transportation took over.

"We were late to school a lot of the time when I was in high school, because of ice in the ocean. The boat wasn't metal, and once we got stuck in the ice coming home from school and had to call the marine operator. There we were in this wooden boat, stuck. We couldn't go forward, backward; we were off Littlejohn's Point. We never did get the marine operator. Finally we had to go around Little Chebeague into Chandler's Cove in the dark and get out on a float that was underwater, covered with ice, climb up a ramp without railings on it. The bus driver grabbed us—he figured out finally what was happening. The next day, my mother sent my brother and me over to the mainland for two weeks to stay with friends. My father was in the Merchant Marine that winter and was away at sea. My mother was left at home alone to fill the oil jugs and bring in the wood and thaw out the pipes. It was extremely cold the winter of 1968. It took about a week for the school district to make a deal with Casco Bay Lines to figure out how to get the other kids to school. This was in the middle of midyear



Photos courtesy of the Miller family

Donna, age two, enjoys her first hunting season.

exams. Some kids missed anywhere from a week to two weeks of school right in the worst part of the year."

It sounds, from what you've said, that in those days there was a kind of island quality that was different from the mainland. Was it more different from the mainland that it is now?

"I would almost say that the difference between Chebeague and the mainland is greater now than it was then because the mainland has changed so much. Even though there's a big difference from when I grew up on Chebeague, when everybody was related to everybody and we didn't have transportation and people weren't going to work on the mainland—when I started school in Cumberland, they still had a bus that went out to Cumberland. I used to take the bus into town. We all used to stay in a hotel and do our Christmas shopping or whatever. I could get that bus right out in front of Greely and go in town. That's why I think it's harder in a way for people on the mainland to understand what it's like on Chebeague—if you look at Cumberland in 1950 it was still pretty agrarian. I went to school with a few people whose families had moved there in the 1940s, but there was still a good percentage of people in Cumberland and North Yarmouth whose families were just like mine, who'd always lived in the town. Today, if you ask kids how many of their grandparents lived in Cumberland, you get just a few.

"People grew a lot of their own food.

When we were kids, my father always had a big garden. Up until the late '50s there were two stores, so if you got short you were all right. My family used to stock up, get as much in as they could, buy in quantities, that kind of thing, but I remember some times during the few winters when we didn't have a store that the weather would be bad for quite a spell. I remember some times when we had fried

lobster and macaroni until the next time my father could get to town, when he would bring home tons of food. He would usually go in his boat, when he was selling his fish or lobsters, and he did all the shopping. My mother wouldn't go to town from Christmas until spring. She'd give him a list and he'd go around town and do it—the meat market, the bread store, the grocery—and they'd deliver the things down to Sargent and Lords on Portland Pier, where he always kept his boat. And he'd just bring them home, row them ashore and wheel them home in a wheelbarrow.

"Quite a few people on the island had cars, but there weren't as many as there are today. My father and mother are in their 80s, and neither of them have ever driven. We never owned a car. We always used public transportation [when we went] into Portland. From the time I was little I knew how to take a bus and hail a cab. That's the way most people did it when I was little. It wasn't until Cousins Island developed that everybody started having cars."

Were summer people a big factor when you were young?

"No, because we didn't have anything to do with them, even though they were everywhere. There were some summer people that we knew—but we had a unique situation [because] our family had a small camp that was down on the shore beside our father's fishhouse. As soon as



Chebeague's fifth, sixth, and seventh grades in 1961; Donna in front row, second from right

**I had a few cousins
who came in the
summer, but I
never thought of
them as summer
people.**



Summer at the fish camp; Donna, brother David, and cousin Theresa, 1958

school was out, we would move. We'd go down and we wouldn't have electricity, wouldn't have a bathroom, wouldn't have everything we had at home, but it was an incredible way for a child to spend the summer. My father would get up at four in the morning and go lobstering. A lot of times we'd go out with him.

"We ourselves didn't have much contact with the summer people in those days. I had a few cousins who came in the summer, but I never thought of them as summer people. There was the East End summer colony—that was a whole different thing. They had their own life, their own society. They were centered around the golf course. I was probably 35 years old before I went to Hamilton Beach swimming. I had friends who grew up on that end of the island who did go. They knew some of the summer people, but I met people when I was 18 or 20 who had been coming to Chebeague for their whole lives. We looked at the golf course as kind of a mystique. It probably comes from my mother, who has a very narrow view of the whole summer operation. When she was a kid, the island people saw themselves as the servants of the summer

people, and she never had good experiences, although there are many people she loves today whom she has known for years who are summer people, but she doesn't recognize them as being "summer people." You select your memory, you know, and the people who grew up around where she lived were nice. It's always people you don't know anything about, you know...

"As a teenager my father worked at the hotel doing grounds work. People opened up their houses and took in boarders; kids never slept in their own beds. It was kind of a different thing then, and that has changed a great deal. Within the island, that distinction between the island people and the summer people is not as great. We have five and six generations of people who've been coming to the island summers.

"When my father was young and was baiting trawls, there would be summer kids hanging around visiting, who now have grandchildren of their own, who still remember that when they were kids he was nice to them—you know what I mean? It has taken a lot of time, but people have developed a mutual respect and realized there wasn't a difference. But in the very early days, there was a difference—there was no question there were people who were served, and there were people who were servants. I have a friend who was having an argument with her aunt, something about summer people. She was saying 'those summer people I'm sick of them, they think they're better than everybody else,' and her aunt, who's about 90, said 'What do you mean? Of course they're better than everybody else—we always knew they were better.' This was that turn-of-the-century feeling. They had dances where everybody wore white gloves and gowns and carried their shoes in little bags. Meanwhile the island people would go to the Hall and square dance. But there were always some of the summer people who liked that part of the

island better, and would enjoy the interaction with the farmers and fishermen on Chebeague—and I think that has helped over the years to develop a mutual respect between many of the islanders and summer folks."

There was an effort, at one time, to have a bridge built to Chebeague from the mainland...

"After Cousins Island had its bridge, in the mid '50s, people on Chebeague were concerned because a large majority of young people were moving off the island. There was a mass exodus. My brother graduated from high school in 1952 in a class of 12. All but one of those kids left Chebeague. People became convinced that the only solution was to get some kind of work, or some way so they could live on the island and work elsewhere, so they tried to get the state to build a bridge. There were several attempts. It was never successful. They had large petition drives. They were always able to get it to referendum but it would never pass—this was about the time that Beals Island was getting its bridge. But even then there was a whole group of island people and summer people who didn't think it was a good idea, because they were worried about what would happen to Chebeague Island as they knew it. I think most of the people who were instrumental in trying to push for the bridge, if they were still living and if you talked to them now, would say it was probably a good idea that we didn't get the bridge. Cousins Island's not even an island anymore, it's just part of Yarmouth, and it really would be different. I'm sure a lot more people would be living [on Chebeague], and you would not find a lot of the people who are living there now...the core of the island would have been displaced by suburban sprawl."

So if there were an attempt to build a bridge now, the people on the island would oppose it?

"Yes."

“Camden, Clear!”

JANE DAY



Marge Knight of Camden Marine, the voice of the Maine coast for more than 20 years

WHEN PEOPLE return to their cruising grounds this summer, they will miss a familiar voice on their VHF. Marge Knight, chief operator for Camden Marine radio for the past 22 years, has retired.

Fishermen, bay pilots, TV and movie greats, the pleasure bent and those in distress—all at one time or another have talked with Marge. She has put through tens of thousands of phone calls to home or office or pier for people on boats the length and breadth of Penobscot Bay, from west of Portland to east of Bar Harbor. Depending on weather patterns, she's picked up fishing vessels 100 miles at sea.

It's human nature to confide more readily in a friendly voice on the phone than to a stranger face to face. In the past two decades, Marge's low-pitched, neighborly voice has won the confidence of countless air-wave friends she has never seen.

Camden Marine handles thousands of calls each year and as many as 300 calls a day during the the summer season which runs from mid-June into October. Then the channels are a-chatter with the gamut of mundane business and ear-pricking gossip of a wide-open party line. People listen, says Marge: "They tell me it's more fun than watching TV."

Just about everyone who has "listened in" on Camden Marine has heard memorable things, particularly during the early-evening busy time in summer. Everyone tuned in for hours when the proprietor of Mary Kay Cosmetics vacationed in Penobscot Bay aboard her yacht, running her Texas-based business over the airwaves. Unidentified tycoons have been overheard instructing their stockbrokers what to buy and sell (pencils and notepads must have been out all over the listening area), negotiating sensitive real estate deals, and telling the home office what to do in their absence. People accustomed to telephones, it seems, forget

that the microphone on their boat's VHF radio is as much a public-address system as it is a link to a telephone on land.

Even very private conversations automatically become public on Camden Marine, occasionally to the titillation of listeners. Marge has been known to break in with a polite reminder that certain topics and words are better left to more "secure" communication systems.

Unlike radio and TV soaps, VHF listeners are frequently privy to real life drama. "Over the years, we've handled so many emergencies. Some so heartwarming. I've been in on more births and more wedding announcements and more engagements. And there's the other side of the coin. I've had to call and tell people of a death, or that their house burned while they were away. You don't realize it, but you get involved."

Marge got involved with Camden Marine in 1970, the year it was founded by the three fulltime Penobscot Bay ship pilots. Aware that most foreign vessels had VHF, and that it was the coming means of communication, the pilots set about securing a tie-in with mainland phone service. When New England Telephone declined to exercise its FCC rights to establish coastal public service stations, the pilots picked them up. The pilots—Captains William Abbott of Belfast, Gilbert Hall of Camden, and Richard Moody, now the Matinicus postmaster—and Belfast lawyer Richard Glass formed Coastal Communications, to serve shipping as the Camden Marine Operator Service. They put through their first call to Camden Town Manager Ray Smith from the passenger vessel PRINCE OF FUNDY on a regular run.

"We were all full-timers," says Captain Hall. "This was a sideline for us." The pilots had to get licensed by the FCC and complete certain training. They put up their own money to build the tower and small building on a parcel of land they bought from the town of Rockport on top of Ragged Mountain. The pilots also financed installation of the tower's power line along the slopes of the Camden Snow Bowl, a mutual arrangement which also had the benefit of making night skiing possible. The tower's high elevation increased its range well beyond Portland and Bar Harbor and seaward to the edge of Georges Bank. Gil Hall, living closer to the mountain than the other pilots, handled the job of operations manager. He monitored calls, got the operators, did the billing, and checked the equipment at the tower.

"It took a lot of spare time," Gil recalls. "We started it from scratch." The pilots took on the communications system, he says, "because we felt it served a real need. We also felt we could make a profit." He adds that they accomplished their first goal, but fell short on the second. "Over the years, we've had topnotch operators. The New York Yacht Club wrote us saying



Courtesy of Coastal Communications

UP AND RUNNING!—The first official call on Camden Marine. Left to right: Dorothy Spear (Camden Marine's first operator), Camden Town Manager Ray Smith, founding partners Gil Hall and Bill Abbott, and technician Bert Magnus.

"I've had to call and tell people of a death, or that their house burned while they were away. You don't realize it, but you get involved."

we had the best operators on the East Coast."

Dot Spear, who had an answering service in Camden, was the first operator. When she gave it up, Marge Knight took over as chief operator, handling the calls from her home for the next couple of years. Monitoring the station from 6 a.m. to 11 p.m. soon became a family affair. Someone had to be home all the time. When traffic picked up in summer, Marge trained her daughter, Felicia, to help out. And her husband Bob, a radioman in the navy for 20 years, filled in when he was in the house. Felicia, now an anchorwoman on WGME-TV in Portland, was a high school freshman at the time. "It was going on all through dinner," she remembers. "It just got out of hand."

Business grew and the station was moved to Helen Andrews' house on Ragged Mountain, high enough to be visible by some of the vessels calling in. Marge worked there with her until more space was needed, and an extension was moved back to Marge's. The two women then could alternate their time on and off.

They came to expect the unexpected call. But even then, there were surprises. One summer when Felicia was filling in, she received a call from the White House in advance of President Richard Nixon's

upcoming visit to the area. Convinced some of her teenage friends were playing a joke, she kidded back and hung up. Marge took the second White House call, which firmly established this was no laughing matter.

Some calls are a matter of life or death; many are the times that Camden Marine has interconnected a boat with the Coast Guard in an emergency. Marge remembers getting a call from an elderly man who was alone on his boat and had run aground. She sensed he didn't know how to use his radio, so she asked his location and relayed it to the Coast Guard. The Coast Guard sometimes cannot hear a call as well as Camden Marine, so she asked them to come up on her channel. She monitored the call while the Coast Guard sent a boat to the elderly man's rescue.

Once in a while, Marge has had to dispense a moderate dose of psychological first aid. She remembers staying on the line with a hysterical young woman, who finally calmed down enough to give names and numbers of persons to call for help. Marge later called back to see that everything was all right. Her worst memory is the call from a man giving CPR to a heart attack victim aboard. Marge put him through to the Coast Guard, and monitored while he tried to answer the Guard's questions and continue CPR. Finally, she heard him say, "He's dead."

Camden Marine made more expansion moves before the pilots sold Coastal Communications to Charles M. Foote. In 1986, he located the operation in its present quarters on U.S. Route 1 in Rockport, with Helen Andrews as office manager and Marge as chief operator. Foote says both women trained him on the job. "Marge is an excellent operator. We're going to miss her. She has the kind of voice that people recognize and associate with good times. They call up to say 'Hi' on their way here in summer, and call to say 'Good-bye' when they leave."

Camden Marine operates three channels—26, 28, and 84. It also monitors Channel 16, the calling and distress channel reserved for emergency Coast Guard calls. The station is open from 8 a.m. to 9 p.m. in winter and 7 a.m. to 11 p.m. in summer. To make a call from a boat, the person on board switches his VHF to one of the three channels, gives his radio call letters, name of boat, and number he wants to call to the marine operator. She dials the number, then “patches” the caller into the land line.

But, says Charlie Foote, “We’re feeling the crunch of cellular. There weren’t as many boats last summer.” He adds that Camden Marine “peaked about four years ago and now has leveled off.” When

Marge signed on as chief operator with the fledgling marine radio station, the bay pilots and commercial fishermen were—and still are—its year-round bread-and-butter customers. Now many commercial fishermen use cellular phones, and all the bay pilots for the past year have switched to cellular. From his perspective as a bay pilot, Captain Gil Hall sees greater use of cellular phones on both U.S. and foreign ships. “It has the advantage of private conversation, one drawback of VHF.” Captain Bill Abbott, a bay pilot for the past 46 years, says while cellular may hurt VHF some, it can’t take over entirely because its seaward range is limited. “Small fisherman will continue to have VHF for quite some time.” [Camden Marine is in the

process of revising its rates—to stay competitive with cellular phones.]

Captain Gil Hall retired after close to 27 years as a bay pilot December 31, 1992—by coincidence, the same day Marge Knight retired from the company he helped organize.

Marge grew up in Brooklyn, New York, in a family of Italian descent, and speaks the language well enough “to get by.” That came in handy the time she placed a call to Italy and was able to explain in Italian to the person on the other end what her customer wanted. As a young woman she sang with bands, did some radio and theater work in New York, and danced professionally in the Catskills. “My first love is dance. But I just never was cut out to turn night into day, which you have to do as a performer.” She was a secretary in New York City in the late 1940s when she met and married a young navy man from Long Island, Bob Knight.

They were stationed at a number of navy bases in the States and for three years in Taiwan, where Felicia was born. Their two young sons picked up Chinese readily. Marge and Bob took lessons and learned to hold their own in day-to-day conversation. Years later, as a Camden Marine operator, she was still fluent enough to speak to the captain of a vessel from Taiwan entering Penobscot Bay. Gil Hall, the bay pilot on board, called Marge back to say the Taiwanese captain was stunned. He never expected to hear a marine operator in Camden, Maine, address him in Chinese.

Marge and her family discovered Maine on a camping trip in 1954 and “fell in love with the area.” The following year they returned to look for property and bought their present home. “We never saw it again till we got back from overseas.” Marge moved to their house in Camden with the three children in 1960, while Bob was based in Rhode Island for the last two years of his naval service. After he retired, Bob taught at the Rockport Elementary School. He and Marge helped organize the Camden Civic Theatre and were active in several productions. Felicia later became a star performer in several shows and went on to study at the National Academy of Dramatic Arts in New York.

Marge confesses to some “mixed emotions” about leaving. She says she’ll miss the people she works with, as well as her longtime contacts with a host of VHF users, including Walter Cronkite on one of his summer visits. “He always takes time to talk and pass the time of day.” There are a number of mementos in her house, cards and gifts from customers. Prominent on one wall is the poster of a pig by another VHF regular, artist Jamie Wyeth. As she retires, Marge relishes the prospect of having the freedom to come and go as she pleases. But when the summer traffic peaks and there’s need for someone to fill in, it shouldn’t be surprising if VHF users hear Marge’s voice again.

Transcript of the First Gubernatorial Call via Camden Marine, KQU 620, at 2:20 p.m. Dec. 29, 1971:

CAMDEN: Stand by, *Prince of Fundy*. One moment.

GOV. CURTIS (KENNETH M. CURTIS, GOVERNOR OF MAINE): Hello.

CAPT. JOHANASSON (JAN ERIK JOHANASSON, MASTER OF THE *PRINCE OF FUNDY*): Hello, Camden radio, Captain of the *Prince of Fundy* speaking.

GOV. CURTIS: Captain Olow, this is Governor Curtis speaking. How are you today?

CAPT. JOHANASSON: Hello Governor Curtis, this is Captain Johanasson of the *Prince of Fundy*. Captain Olow is not aboard today.

GOV. CURTIS: I’m sorry. I had an opportunity to try out this new radio system and say hello to him, and I said I’d be delighted to talk to him any day whether it’s on a new radio system or not, but I’m pleased to be able to say hello to you.

CAPT. JOHANASSON: We are pleased to have this new radio system and I think we could use it a lot.

GOV. CURTIS: How’s the weather out there today? Over.

CAPT. JOHANASSON: The weather, it is fine weather today. A slight northwesterly breeze, smooth sailing. Everything is fine out here.

GOV. CURTIS: I’ll tell you, sitting here at this desk buried with paper, I envy you, and I’d like to be out there with you today instead of here. Over.

CAPT. JOHANASSON: You could come some other time, any time you wish to come out here and you’re very welcome.

GOV. CURTIS: Thank you very much, Captain. I certainly want to express my compliments to Coastal Communications Inc., and to my good friends of the Penobscot Bay Pilots for installing you this new service and certainly want to wish you and everyone aboard the *Prince of Fundy* a happy and successful new year.

CAPT. JOHANASSON: Thank you very much, Governor Curtis. I’m very pleased to speak to you, and a happy new year to you. Good bye.

GOV. CURTIS: Good bye.

From the Logbooks

(continued from page 11)

Back to the future, we can report that shortly afterwards the Institute found a conservation buyer for the key 86-acre parcel at the north end of Metinic's spectacular ramparts. The Conservation Fund of Washington, D.C., which has preserved everything from Civil War battlefields to wilderness mountain peaks, used its financial acumen and national connections to put together an attractive deal. The purchase will provide the local lobstering family, whom we deeply admire and whose boats have fished these productive shores for nearly a century, a means of protecting both seabirds and fishing grounds for longer than any of us will live.

Our final effort of 1991 is to try to find a year-round boat which will allow us to connect with islanders during the important months of December through March when islanders appreciate all the friends that can muster:

On the strength of a donation from Institute Trustee Betty Noyce and several months of searching harbors from Perkins Cove to Bass Harbor, we locate a 36-foot Repco hull, finished off with a galley, head, and five berths. After minor refitting and repairs, RAVEN, a peaked-bow, black-hulled beauty, is commissioned to run between Monhegan to the Cranberries on Publications and Community Services missions. Although our fish hawks find winter islands farther south, a raven is a solitary wanderer among the islands in all seasons.

At the end of the 1992 small boat season, RAVEN and FISH HAWK rendezvous with the two 18-foot Maine Island Trail Association boats, EIDER and SCOTER, along with 30 or 40 kayaks and an assortment of other small craft at Warren Island for MITA's annual conference. At the end of the previous year's conference we had reported in *Log of the Fish Hawk*:

When FISH HAWK arrives in late afternoon, approximately 100 members in half as many boats have gathered in half as many boats to discuss their role in the future of the archipelago. The Institute is concerned with the integrity of the ecosystems that sustain life in year-round communities out to the outermost skerries shared only by seals and seabirds. Island Trail members are the eyes and ears of the uninhabited islands offshore and we agree that our joint efforts under the umbrella of the Institute are the best hedge against unwanted futures.

But in the intervening year, MITA's leadership, championed by founder David Getchell who has operated as an important advisor since his retirement two years earlier, has concluded that an autonomous MITA is best for their organization. The Island Institute will cooperate with representatives to MITA's new Board of



Directors, and we salute our newly independent colleagues as they forge their role among this thousand-isled coast.

As the winter of 1992 turns in January to the winter of 1993, ten years of service to the Maine islands is telescoped back through the frosty windows of RAVEN which lies quietly on a borrowed mooring amid Stonington's frozen islands and fishing fleet, whose

fishermen are struggling to keep the ice from freezing boats fast to their moorings. Tomorrow we will be in Burnt Coat Harbor to talk with some of the Swan's Islanders who have been struggling to keep the salmon and trout farm going. With 11 full-time fish farm jobs and another 20 or so part-time harvesting and processing jobs at stake, something like a quarter of the families in the island community have a direct stake in whether the project can be resur-

rected and its earlier management woes corrected. Meanwhile Jim Schwellenbach will be talking with teachers over the upcoming April Island Schools Conference which will be focusing on how island high schoolers make the difficult transition from their unique and small communities to the swirl of the mainland culture.

Balance is the single word on which the vision of the volunteers and staff of the Institute has turned for the past decade. It is a word which connotes perhaps more than it communicates. But in looking back over the past ten years, it is plain to see that balance is best defined in actions rather than words, and it has been at places like Bass Harbor and Campbell Island; in Lunt and Burnt Coat Harbors; at Great Diamond and Long and Chebeague among many others. To keep moving, to spread the news, to forge links, and to simply keep the lights burning. This is what we mean to do as we fire RAVEN's engine back to life and head across Jericho Bay into the winter life of an entire archipelago that sustains these proud, independent communities which we all know are more threatened by the sultry breezes of summer than the Arctic gales of winter.

**Balance is the single
word on which the
vision of the Institute
has turned for
a decade.
—1993**



THIS ISLAND EARTH

The three species of tern that visit the Gulf of Maine each year are travelers passing through.

Arctic terns, one of these species, feed and rest at four Maine islands, way-stations on an annual 22,000-mile flight that takes them from nesting grounds in the Arctic to krill-rich waters among the ice floes of Antarctica.

Along the way, as the birds encounter spilled oil, developed coasts, filled wetlands, and the multitude of other obstacles put in their way by man, they become a metaphor for two things: the interconnectedness of the natural world, and the fragility of the systems upon which we all depend.

Terns are part of life in the Gulf of Maine, in the Shetlands, on Prince Edward Island, and along much of the "Atlantic Rim." As they travel through these places each year, as their numbers wax or wane or even disappear, they speak of the health of Island Earth. If we are to understand what is really happening to our planet, we must listen to the terns.

A Global Species

JOHN HAY

TERNS ARE A RACE of graceful, nervy birds which can be found in coastal environments around the globe. The black-capped, fork-tailed varieties, commons, arctics, and roseates (now an endangered species) arrive at their nesting grounds in the spring, often from tremendous distances.

Where birds and men both depend on fish, their fates are intertwined. When herring virtually disappeared from the Maine coast, tern and other seabird populations dropped too; when herring came back in 1991, productivity in tern chicks reached a record high.

Terns can adjust to fluctuations in their food supply. Human activities—sewage discharges and other pollution, overfishing that reduces stocks to low levels—have effects on terns that are still not clear.

Terns are a vital signature of an oceanic world of tremendous versatility and passionate moods. They ought by rights to be occupying these coastal worlds in great numbers, during each annual nesting season. Unfortunately the odds have been against them, and their populations have been steadily declining along the Atlantic shore.

They were decimated during the 19th century. By 1890, so many had been slaughtered for the economic interest of the millinery trade, which used their feathers to adorn women's hats, that their colonies were reduced by 50 percent. Of the 75 colonies counted in 1885, only 16 were left by 1900. The pressure on terns, as well as shorebirds (also killed off to a terrible extent) was finally relieved as a result of protective legislation passed in 1916. After that they made a slow comeback, but after 1940 they were on the decline again, primarily because of a booming population of herring and black-back gulls.

A growing volume of human garbage, plus waste from fishing vessels, has helped the gulls, once relatively scarce, to increase by leaps and bounds. They have often taken over the nesting islands before the terns could reoccupy them in the spring. At other sites, gulls have so disturbed and discouraged the terns by their presence as to make them desert their nests. In a few instances, gull pressure has been relieved by selective measures such as poisoning to control their numbers.

Least terns, the smallest variety, with yellow bills and tinkling cries, are far less numerous in Maine than the other species. At last count there were only 95 pairs. Since they nest on the beaches, at or above the high tide line, spring storms with high tides may wash out their nests (mere cups in the sand) although they will lay eggs again if it is early enough in the season. Foxes, cats, or skunks may also destroy their nests. In coastal regions farther south, where least terns are more numerous because of more extensive beaches, they face the pressures of a larger human population. Beach buggies have often driven over their nests, especially at night.

Commons and arctics subsist in small colonies scattered among the islands of Maine, but may not for long. Unlike the roseates, these two species are aggressive in defense of their

nests against intruders, but this characteristic does not help them when they are few in number. They are vulnerable to predatory raids by rats, foxes, coons, minks and weasels, owls, and night herons. Eggs have been destroyed by ants. Unfledged chicks, with only their down to protect them, may die as a result of exposure to cold, wet weather, or the hot

summer sun. Chicks have always been at risk, of course, but the population as a whole was large enough to make up for the losses. Our overwhelming human presence on the Atlantic shores, together with our fellow scavengers, the gulls, has weighed the odds against the terns. Protecting them has become essential.

Tern management efforts in Maine have succeeded in increasing bird numbers in some instances and stabilizing them in others. The number of common terns rose from 2095 pairs in 1977 to some 4000 in recent years, but only 128 pairs of roseates nested in the state. The majority of tern species in Maine, some 84 percent, are protected at four major islands: Seal Island, Petit Manan, Matinicus Rock, and Eastern Egg Rock, as well as Machias Seal in Canada. These sanctuaries have been essential for the birds' continued survival on this coast. But confinement to only a few islands also makes the remaining birds more vulnerable to accident, disease, oil spills, and pollution of their food supply through toxic wastes, not to mention the disappearance of fish stocks once thought to be an inexhaustible resource.

Terns are renowned travelers. After the nesting season, the arctic tern journeys each year over to Europe, where it flies down the coastline, feeding as it goes, as



Arctic tern

Peter Ralston



Our overwhelming human presence on the Atlantic shores has weighed the odds against the terns.

far as Africa. From there it migrates to the Antarctic where it spends the winter feeding on shrimp-like krill between the ice floes. The spring migration takes it on a more westerly course up the mid Atlantic—an annual migration that may add up to 22,000 miles. Roseates go as far as Guyana, in northern South America. Commons have been seen along the coastline as far as the southern tip of the continent.

Terns have always had to face great odds during their annual attempts to nest, find food, and raise their young. Yet as they are seasonal residents of the islands in the Gulf of Maine as well as natives of marine habitats around the world, so they meet all obstacles with an inborn skill and intensity. "Adaptation" is too weak a word to describe their profound engagement with the dynamic worlds they inhabit. They are not passive, but supremely active participants in earth's moods and changes. Modern humans seem like outsiders by comparison. We must continue to ensure their presence among us, as an integral part of our lives and understanding, a means whereby to measure the ancient realities of all the islands we too inhabit.

*John Hay, a recipient of the Burroughs Award, is past president of the Cape Cod Museum of Natural History and former professor of environmental studies at Dartmouth College. He has written *The Run*, *The Undiscovered Country*, and *The Immortal Wilderness*, and most recently, *The Bird of Light*, an evocative portrait of terns.*

"An Island Living" *draws islanders to Prince Edward Island*

A conference held on Prince Edward Island last September drew more than 100 representatives of two dozen island nations and provinces scattered around the North Atlantic and the Mediterranean.

Organized by the Institute of Island Studies at the University of Prince Edward Island, the two-day meeting focused on economics, relations with mainland governments, resource development, tourism, and the effects that big trading blocs—the European Community, the North American Free Trade Agreement—are likely to have on island communities.

"In recent years there has been an ever-increasing interest in the world's small islands and their place in the architecture of an emerging global system," wrote conference chairman Barry Bartmann, a professor at the University of PEI. Twenty-seven island micro-states can claim the full prerogatives of sovereignty in the international community, he pointed out, while many other islands are constitutionally separate and have varying degrees of autonomy.

The PEI conference was timely, Bartmann suggested, in light of the development of the European Community and the North American Free Trade Agreement, as well as the uncertainty over the future of the Canadian Federation.

"Some North Atlantic islands are doing well—much better than islands in the Maritimes," observes Institute director Harry Baglole, who helped organize the conference. Meetings such as the September session and another one planned for 1994 that will focus on island demographics will hopefully provide "insights" into why some islands prosper while others don't.

From what was said at the September conference, Baglole concludes that "some degree of administrative autonomy" is critical to economic success. Traditional occupations and the intelligent use of resources are important, but so is the ability to find a niche in the worlds of advanced technology, information, or finance. "Islands can't be insular," Baglole adds. "They must be more astute than mainland communities."

More than 20 islands or island groups were represented at the PEI conference, including the Finnish Aland Islands, the Azores, Bermuda, Cape Breton, Corsica, Cyprus, Denmark's Faroe Islands, Greenland, Guernsey, Iceland, the Isles-de-la-Madeleine, the Isle of Man, Jersey, Malta, Newfoundland, Orkney, PEI, Saaremaa (a Baltic island that is part of Estonia), Saint-Pierre-et-Miquelon, the Shetlands, Vega (north of Norway in the North Sea), and Scotland's Western Isles. —DDP

Oil coats the Shetlands' shore

DAVID D. PLATT

The BRAER, which spilled 85,000 tons (25 million gallons) of light crude oil into the North Atlantic and onto the shores of the Shetland Islands last January, was not unknown to authorities in Maine. Just two years earlier, after experiencing problems with her unloading system, the Portland Pipe Line put her on a list of vessels "unacceptable for return to Portland Harbor." Repairs were subsequently made and the ship was removed from the don't-come-again-please list, but she never made it back to Portland.

The BRAER disaster prompted lots of press coverage, much of it focusing on its implications for the Shetlands' abundant wildlife. One marine biologist predicted the oil would form "a toxic cloud" in Shetland waters that would destroy untold numbers of birds, fish, and marine mammals.

Most at risk, according to experts, were black guillemots, shag, eider ducks, long-tailed ducks, and the

great northern diver. (Eight percent of Europe's great northern diver population lives on the Shetlands.) Puffins, guillemots, razorbills, fulmar, and kittiwake had left the island for the winter. Whether residues will affect them when they return in the spring to breed won't be known for some time.

The predictable media attention to oily birds and seals, which can always be counted on to make better television pictures than dirty farm animals, smeared car windshields, or lost jobs (also brought about by the BRAER spill), brought a backlash reaction in the Shetlands. "The people of the Shetland Islands, exasperated by the furor over the seabirds and otters, finally lost their tempers at the end of last week," reported the Associated Press a few days after the spill. The chorus of complaints added up to a plea for a more balanced approach.

Some residents directed their anger at a government-sponsored dispersant-spraying operation, threatening to block runways so detergents believed to be toxic wouldn't be used to break up the spill. The planes flew anyway (when weather didn't keep them on the ground), but it's likely the weather did more to disperse the oil than any substance dropped on it from the air.

There was frustration at the lack of attention to spill-caused problems other than wildlife. Coverage of inadequate safety standards at sea ignored the danger to sailors, charged maritime unions. And in all the environmental uproar, it was far too easy to overlook that no *human* life was lost.

"It's particularly sad when local ferries in the Far East, in places like Indonesia and Bangladesh, go down with the loss of 400 to 500 people and attracts only a small mention in the press here amounting to two or three lines," said a representative of the International Transport Workers Federation (ITF).

The effects of negative publicity on tourism were a matter of concern as well. The Shetland Islands expected 56,000 visitors this summer, and officials want to emphasize the area remains rich in bird and sea life, the executive director of the Shetland Islands Tourism agency told the AP.

Businesses that count on tourism were planning a \$765,000 advertising campaign to attract tourists.

Small businesspeople, meanwhile, fretted about things like the health of their grazing trekking ponies.

Much of the produce on Mainland, the large island in the Shetlands where oily spray blew ashore and coated crops, was declared unfit for human consumption. The region is known worldwide for its sheep and wool, and while few of the news stories focused directly on problems in that sector of the island economy, the publicity wasn't expected to stimulate sweater sales.

Shetland's fishermen and its large aquaculture industry suffered as pens of salmon were coated with oil and the government imposed a 400-square-mile no-fishing zone offshore. Together, fishing and fish farm-



Seven ports on or adjacent to the Maine coast—Portsmouth, N.H., Portland, Searsport, Bucksport, Bangor, and Eastport, Maine; and Saint John, New Brunswick—handled a total of 8.65 billion gallons of oil in 1992. THE BRAER, which spilled 25 million gallons along the coast of Britain’s Shetland Islands last winter, demonstrated what can happen when oil ends up in the wrong place, and that no place along a tanker’s route is immune from disaster.

If the BRAER had lost power en route to Portland during a storm, the same spill could have happened on this coast.

ing employ about 30 percent of the islanders. “Fish farmers are facing bankruptcy with losses looking as if they may run into millions of pounds,” reported the AP. A big British supermarket chain—Marks & Spencer—told salmon producers it wouldn’t be buying fish for a while because of possible contamination, and Tesco, the country’s biggest fish dealer, said it wouldn’t buy fish caught offshore. “We have been told by our insurers that we will get nothing for this,” said one fish farmer as he looked out over his pens. “We can only claim in the case of mortality. None of these fish have died; it’s just that we can’t sell them.” Interestingly, fish prices held up in the weeks after the spill, with haddock fetching about \$125 for an 88-pound box. The market for whiting, cod, monkfish, and squid was good, too.

Two big environmental groups, Greenpeace and Friends of the Earth, were highly visible during the weeks following the spill. Greenpeace called on the British government to prohibit tankers in coastal straits



and restrict oil exploration near sensitive coastlines. Friends of the Earth backed islanders in their efforts to keep the government from using dispersants, contending they would enter the food chain.

A delegation from Alaska, where the EXXON VALDEZ spilled somewhat less oil than the Braer in 1989 but did it where it wouldn't disperse, showed up in the Shetlands to offer moral support. The Alaskans had been there before, to study the Shetlands' spill-contingency plans.

There were brighter moments for the Shetlands as well, or at least suggestions that environmental catastrophe might stimulate technological advances. An Australian politician ballyhooed the use of surplus wool from his country to mop up oil spills, taking advantage of wool's "particularly effective absorbent capabilities." No word from the owners of the oil-soaked sheep in the pastures overlooking the spill site.

In Elkhart, Indiana, "a new, 75-cent test strip that can identify seawater contamination in fuel tanks might have helped avert an oil tanker accident that occurred today in the Shetland Islands," reported the test strip's manufacturer in a news release. The test strip would simplify the sampling of fuel lines aboard ships like the BRAER; initially, it was water-contaminated fuel that caused the ship's engine trouble,

resulting in the grounding and spill.

Ironically, the BRAER wasn't headed for Sullom Voe, the large refinery that has brought prosperity to the Shetlands in recent years. The Sullom Voe terminal is one of the largest in Europe, and the Shetland Islands themselves lie in the midst of the British North Sea oil industry. The BRAER was only passing through, on its way from Norway to a terminal in eastern Canada. A Swedish former captain of the ship commented after the spill that when he was in charge, he never followed the Shetlands route to Canada—he would pass farther to the north. The ship was in harm's way when she lost power, he speculated, because her owners insisted on a money-saving shortcut. The 18-year-old ship was late in her useful life, and recent low prices for crude oil have made tanker operations marginal at best. "It seems we do not have much say about passing ships," said one local man, reading newspaper reports of the disaster.

The BRAER spill was not an isolated event. On December 3, 1992, just a month earlier, the Greek

tanker AEGEAN SEA went ashore in northwest Spain, spilling 23 million gallons of light crude. The tankers were roughly the same size and age. Both incidents affected commercial fishing. A third tanker spilled oil in Indonesian waters in January.

The Shetlands, which lie nearly 200 miles northeast of the Scottish city of Aberdeen, are one of the windiest corners of Britain with an average of 58 days of gales a year. Oil, fish, and sheep farming are the islands' economic mainstays. Salmon farming in offshore pens is worth \$50 million a year to the Shetland economy. Largely because of the oil refinery, unemployment is not a problem; the recession affecting the rest of Britain has not touched the Shetland Islands' 22,000 people. The islands attract arctic birds in the winter and large colonies of puffins during the summer breeding season. Guillemots, shags, and razorbills are permanent residents.

If the BRAER had lost power en route to Portland during a storm, wrote Christine Kukka in a new Island Institute publication, *The Working Waterfront*, the same spill could have happened on this coast. Maine ports have only harbor tugs, which are not large enough to venture far out to the open sea in stormy weather and steer a powerless oil tanker away from a rocky coast. The closest ocean-going tug in the U.S. is probably in New York. According to the Canadian Coast Guard, even Saint John, New Brunswick, which handles massive tankers, rarely has an ocean-going or salvage tug available.

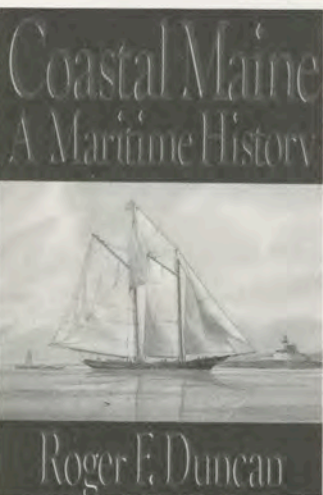
Joining the "Atlantic Rim"

Finally, some editorial comment implying that the media in Maine, at least, are beginning to see the big picture. "We need to start thinking of ourselves here in Maine as being part of the Atlantic Rim," wrote George Neavoll, the editorial page editor of the Portland Press Herald. "This is the Atlantic Rim, and Portland is one of the capitals of the region. So are Boston, Halifax, St. John's, Reykjavik, Bergen, Hamburg, Amsterdam, Lisbon, Dakar, Lagos, Cape Town, Buenos Aires, Rio de Janeiro, Caracas, San Juan, P.R., Miami, Washington, D.C., and New York. Far from being 'at the end of the line,' as I've heard some apologists for Portland's geographical location describe it, Portland is at the center of it all, and so is Maine." Neavoll's observations appeared in a column in which he also pointed out that Western cities and states think of themselves as part of the Pacific Rim, a "community of free-market economies that benefit from the trade and investment they share and promote." —DDP

REVIEWS

Coastal Maine: A Maritime History by Roger F. Duncan; New York: W.W. Norton Co., 1992. 573 pages, hardbound, \$35.00.

reviewed by David D. Platt



Regional histories can be one-dimensional affairs, written for limited audiences and reflecting their authors' peculiar list of interests. *Coastal Maine: A Maritime History* has none of these problems. It was clearly intended for a wider audience than Roger Duncan's venerable *Cruising Guide to the New England Coast* (10 editions and still going strong), but as he does in that book, Duncan gives the reader a lot more than how to get from point A to point B.

Admittedly, this is "maritime" as opposed to political or social history. But anyone expecting a few hundred pages on boats and battles is going to get a surprise: Duncan's topics include economics, exploration, technology, fisheries, and the shifting

opportunities available to residents of this coast over the past several centuries. The battles are there, of course, but so are the treaties and kings and geniuses and rascals that make the history of the Maine coast so interesting. There's even a ghost to keep things moving along—but it's the insights that make this book so good.

In some of his best chapters Duncan concerns himself with fishing. The story here is one of technological change: how Maine fishermen from the 16th century to the present have used new inventions to take advantage of untapped markets, shifting fish stocks, and changing public tastes. He describes the evolution of handlining from the early 19th century when men fished from "berths" along the rail of a schooner to the rise of the dory fishery in the 1850s and then the development of trawl fishing for cod, using long lines with spaced hooks. Different systems were invented for mackerel and other species, depending on demand, until in 1864 ten fishermen from Newagen bought a 100-fathom seine for \$2400, tried it out outside Newagen harbor, and in a single afternoon hauled in \$8000 worth of fish. Continuing to experiment with new technologies from boat designs to satellite navigation systems, commercial fishermen have been ratcheting up their ability to harvest the ocean ever since.

"The bottom of the Gulf of Maine is a highly complex ecosystem," writes Duncan at the conclusion of his chapter on the decline of the region's fisheries. "Remove or destroy several parts, and the balance is upset, other parts suffer, and perhaps a new and undesirable equilibrium is established. To hunt cod, haddock, and redfish nearly to extinction, then to turn as vigorously to mackerel, squid, and butterfish, or to shrimp and scallops, may not be the best way to ensure a continued harvest of fish and a continued livelihood for Maine fishermen." A very up-to-date point of view, unfortunately not yet adopted by government fisheries managers.

Interspersed with the explorers, kings, and even the ghosts, it's insights like this (not to mention the refreshing turns of phrase familiar to readers of his *Cruising Guide*) that make *Coastal Maine: A Maritime History* such fascinating reading. Few people other than Roger Duncan could have written such a book.

No Fish & Our Lives, Some Survival Notes for Newfoundland by Cabot Martin. St. John's, Newfoundland: Creative Publishers, 1992. 209 pages, paperback.

reviewed by Ted Ames

This fascinating collection of articles by Cabot Martin gives much-needed insight into what caused the Newfoundland cod fishery to be destroyed in 1992. In so doing, he has also identified the mechanism that has repeatedly depressed our own New England groundfishery since the early 1950s.

I reviewed this book with particular interest not only because of my own experience groundfishing off the Maine coast (since 1960), but because both my father and brother were part of the "foreign fleet" fishing the Newfoundland shore prior to enactment of the 200-mile limit.

No Fish & Our Lives is divided into 10 sections and starts by examining Newfoundland's historical cod fishery and its demise before the onslaught on modern fishing technology. Cabot Martin aptly points out that it was not simply the modern otter trawler that caused the Newfoundland cod stock to collapse. The real culprits were management policies that encouraged otter trawling with its great harvesting efficiency over the perceived "inefficiency" of the inshore fisheries.

One is forced to question why the ecological efficiency that allowed a sustainable inshore fishery to exist for centuries on Newfoundland was discarded for short-term profit. And how do we avoid making the same mistake in our own fisheries? Had management properly restricted the deepwater trawlers, the resource might still be in good shape.

Cabot Martin's underlying theme reverberates throughout the book: that the fishing communities of Newfoundland evolved as an integral part of the ecosystem based on cod harvesting. The point is clearly made that the delicate balance existing between fish, fishermen, and community was turned upside down by the use of technology that did not—indeed could not—properly respond to fluctuations in abundance as the inshore fleet had done.

Martin's final topic, "Masters of Our Seas or Masters of Nothing," challenges the reader with a bold course of action that could result in Newfoundland regaining control of its own fisheries and relying on the use of more appropriate technologies for harvesting its codfish. In all, Cabot Martin has presented a provocative peek into fisheries management run amok. He has examined the causes of the problem and had suggested a responsible approach to dealing with it.

That destruction of Newfoundland's cod stock now threatens the social, cultural, and economic survival of Newfoundland should feel uncomfortably familiar to us along the Maine coast. But for us, the solution seems less clear. For decades otter trawling has produced over 80 percent of the total catch in the Gulf



**NO
FISH
&
OUR
LIVES**

Some
Survival Notes
for
Newfoundland
by
Cabot Martin



of Maine and continues to be the major method of groundfish harvesting.

What we need is perhaps not so much a return to the fishtrap technology of Cabot Martin, but a return to fishing methods that protect juveniles and spawning aggregations of fish while conserving the marine habitat that nourishes them.

Part of the solution may also depend on recognizing the relationship of fishermen to the stocks that Cabot Martin describes so well. If one could extract just two things from his book that might encourage sustainable catches, it would be:

- To encourage inshore fisheries and the communities that support them.
- To discourage large, ultra-efficient harvesting systems that are capable of destroying a fishery before they themselves go out of business.

One cannot help but conclude from *No Fish & Our Lives* that fisheries policies must aim for sustainable harvests rather than economic efficiency. And sustainable harvests can be obtained most effectively by protecting both the inshore fleet and the coastal fishing communities that shelter them. It is from those communities that the conservation ethic voiced in Martin's book is heard. If we are to properly manage our own fisheries, perhaps we should listen to their pleas for protection of spawning grounds and juveniles.

Ted Ames of Stonington is president of Maine Gillnetters Association.

Perennial Island Classics for Children

Speaking as they do of isolation, uniqueness, sharing, courage and other special qualities, island stories are an important part of children's literature. Priscilla Platt, an elementary-school librarian, describes some of the best examples.

One of my happiest memories in the reading-aloud-to-my-children department stems from a week many summers ago. I was camping with my husband and two small sons on a bluff overlooking Penobscot Bay and Islesboro. Each night for a week, all four of us crawled into our tent and by the light of a flashlight we read Francine Litt Brown's *Lighthouse Boy* (Down East, 1968). As far as I know, the story of David Morgan's life on a rocky Maine island, his daring exploits rescuing shipwrecked passengers, and his unhappiness at the taunts and ridicule of his more sophisticated mainland classmates is all a made-up story. But for the four of us, snuggled in our sleeping bags, David's island world became very real.

In *Abbie Burgess, Lighthouse Heroine* (Down East, 1968) authors D. Jones and Ruth Sargent tell us about a real heroine, Abbie Burgess, who arrived on Matinicus Rock in 1853. A story, based on the same character and historical events has been written for beginning readers in Peter and Connie Roop's book, *Keep the Lights Burning, Abbie* (Carolrhoda, 1985). *The Lighthouse Keeper's Daughter* (Little, 1987) by Arielle Olson tells the story yet again.

Gail Gibbons' book, *Surrounded by Sea: Life on a New England Fishing Island* (Little, 1991) is a nonfiction book using watercolor illustrations and brief text on each page. Island readers may recognize this "New England fishing island" as Matinicus, where the author is a seasonal resident. *Celia's Island Journal* is a lovely picture book based on adapted selections from Celia Thaxter's childhood journal written on White Island where her father was lighthouse keeper. Barbara Cooney treats us to four generations on a New England coastal island in her brilliantly illustrated book *Island Boy* (Viking, 1988).

Charles Martin has written and illustrated several picture books about living on Monhegan, describing Heather and her young friends as they find plenty of activities to keep themselves amused on the small island. The first in this series, *Island Winter*, is reviewed by Donna Miller Damon of Chebeague Island, with help from her chil-

dren, Rachel, 9, and Thomas, 6, who are longstanding Charles Martin fans.

Charles Martin's picture book *Island Winter* tells the story of winter on an island from a child's perspective. The watercolor illustrations are Monhegan Island, but the story evokes a sense that Martin could be talking about any island on the Maine Coast.

The children attend a one-room school house that is also the site of the community Halloween party. Relatives come from away to spend Thanksgiving on the island. The reader shares the children's excitement when the first snowflake falls and the skating pond freezes over. Christmas comes and the community unites again for a party with presents for all of the children.

Lobstering is a subplot in *Island Winter*. Throughout the book the men, women, and children are painting buoys and patching traps in anticipation of "trap day" on January first, a unique Monhegan tradition. Winter days turn into spring and the children create their own excitement. They go to the beach in search of arrowheads, spend a warm winter day lobstering, and watch the geese as they head north. The frogs begin to croak, and a few strangers appear carrying sketch pads and easels. School is over, but the cycle continues as Heather hears a newcomer say, "What do you do here all summer?"

Charles Martin has captured a child's island winter and has preserved an important aspect of island social history. Best known for his *New Yorker* covers, Martin has also written and illustrated several other children's books. A long time lover of Maine islands, Charles Martin continued the story of Heather and her friends in *Summer Business*, 1984; *Island Rescue*, 1985; *For Rent*, 1986; and *Sam Saves the Day*, 1987. The "island series" is published by Greenwillow Books, New York.

Books about the Bay of Fundy

In Tidal Life *Harry Thurston* (see "Head of the Gulf," page 24) cites a number of books he has found useful as further reading on the natural and cultural resources of the Bay of Fundy. The following "highly recommended" list is reprinted, with permission, from the publisher, Camden House Publishers, Ontario.

There are no books that deal in depth with the Bay of Fundy environment, but a number of books prove useful as background reading. Francis E. Wylie's *Tides and the Pull of the Moon* (New York: Berkley Books, 1979) is a lively nonmathematical treatment of the mechanics and oceanography of the tides and tidal power. *Life and Death of a Salt Marsh* by John and Mildred Teal (New York: Ballantine Books, 1983) has firmly established itself as the best book on the subject. And, of course, Rachel Carson's classic, *The Sea Around Us* (New York: New American Library, 1961), is worth rereading. Added to this short list is David Gaskin's comprehensive *The Ecology of Whales and Dolphins* (London: Heinemann, 1982), which borrows from his own extensive research on whales and dolphins from the Bay of Fundy. A general book on whales, with an emphasis on descriptive anatomy and illustrations, is Richard Ellis' *The Book of Whales* (New York: Alfred A. Knopf, 1985). *The Sea Has Wings* by Franklin Russell (New York: Doubleday, 1973) is a beautiful evocation of the seabird's year, with photography of Machias Seal Island by Les Line.

Three books of a literary bent, set in Fundy, are: the collaborative portrait in words and pictures of a weirman, *Brown's Weir*, by Gwendolyn and Wayland Drew (Ottawa: Oberon Press, 1983); the wide-ranging work of natural history and philosophy, *Dancing on the Shore, A Celebration of Life at Annapolis Basin*, by Harold Horwood (Toronto: McClelland & Stewart, 1987); and Elizabeth Jones' *Gentlemen and Jesuits, Quests for Glory and Adventure in the Early Days of New France* (Toronto: University of Toronto, 1986), a historical account of the voyages of discovery in the Bay of Fundy.



Jeff Dworsky

ISLAND ZEN

DAVID WEALE

HAROLD MACLEOD, a thoughtful man, lived most of his life in Irishtown, Prince Edward Island. He told me once that when he recalled the faces of neighbors he couldn't think of one that was truly sorrowful or unhappy. I never forgot that, and have often wondered about it. Is it possible that those people who worked so hard and had so little were contented?

I am, of course, aware of what is called selective memory, that capacity in people to block out what was harsh or difficult and to remember only what was pleasant. It's what makes the "good old days" so good, but the question refuses to go away. Despite the hardship, drudgery, and limited horizons of that society, was there perhaps a peace which graced the lives of its inhabitants, a peace which now eludes most of us? It's the kind of thing you could never demonstrate conclusively, but after conversations with many elderly Islanders I'm also inclined to believe it had something to do with meditation.

I'm not suggesting for a minute that there was any conscious or deliberate discipline of meditation. Not at all. The very word would have sounded suspiciously esoteric. What I am suggesting is that the opportunity for contemplation was built right into the order of that society: A kind of unself-conscious Island Zen which contributed greatly to emotional well-being. There were worries aplenty, but many of the mindless, monotonous, repetitious tasks provided regularly the occasion to slip underneath your cares into a still

place of forgetfulness and equilibrium. Whether you were following horses, thinning turnips, hooking mats, pulling teats, picking blueberries, stacking wood, ironing shirts, grading potatoes, spinning yarn, stoking grain, or knitting mitts, there were frequent periods when physical labor could be combined with mental repose. Then, at the end of every week, there was the enforced idleness of the Sabbath. All of that might not have contributed greatly to what we call intellectual development, but my guess is that it was the source of a deeper, more fertile wisdom.

I suspect, as well, that the habitual, intimate interaction with the natural order of living things was a powerful reminder of the deep eternal movement of regeneration. Daily contact with plants and animals, and with the elemental seasonal forces of sun, wind, and weather, created a strong inviolable rhythm which underscored all activity, and modified greatly the frenetic tendencies of human compulsion. Nature is often wild, but seldom frantic.

There was a proclamation of the deep movement of creation in each season of the annual cycle, but summer was the time of mature eloquence, when nature was bright with revelation. In the profusion of summer flowering was testimony to all the great mysteries of concealed grace: praise and profession in the open face of the daisy, rapture in the celestial blue of roadside chicory, penance in a swath of purple vetch, and atonement in

crimson blots of wild elderberry beneath the cruciform of a great dying spruce.

There was one custom on many farms which must have had a wonderfully restorative power. On a summer's evening, after all the inside and outside chores were finally completed, many folk would sit quietly, either on the verandah or on the sunporch, or perhaps just in the kitchen and enjoy the stillness of the twilight. One woman referred to this as "sitting in the evening," and said it was a blessed time on their farm. In that utterly inexorable part of the day, of lengthening shadows and fading light, the quietness broken only by last birdsong, they just sat, and the serenity of the evening seeped in until it touched and mingled with the deep serenity of their own persons.

It was a time of letting go and letting be in a spirit of benediction and relaxed resignation; of being still and knowing that God, after all, is God. And sometimes, just at dusk, there would be fireflies, winking and flashing along the edge of the woods, celebrating the descending darkness, backdrop to their small shining.

David Weale is a professor of history at the University of Prince Edward Island and an eloquent advocate for island lifeways. His essay "On Islandness" was published in the 1991 Island Journal in our inaugural "This Island Earth" section. The foregoing essay is reprinted with permission from Them Times, published in 1992 by the Institute of Island Studies, Charlottetown, Prince Edward Island, Canada CIA 4P3, (902) 566-0386.



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Peter Rakston

*People who have not done it cannot conceive of the hassles
involved in commercial fishing, and people who are
involved have a 10,000-year-old divine right to exercise
instinctive contempt for the terrestrially comfortable.*

GEORGE PUTZ

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