

cover photo by Peter Ralston

These sheep are part of centuries old, specially adapted Penobscot Bay island breeding stock. Recently shorn, they are in transit to Allen Island.



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This membership journal of The Island Institute is a resource management and information service for residents and visitors who care deeply about the islands of the Gulf of Maine.

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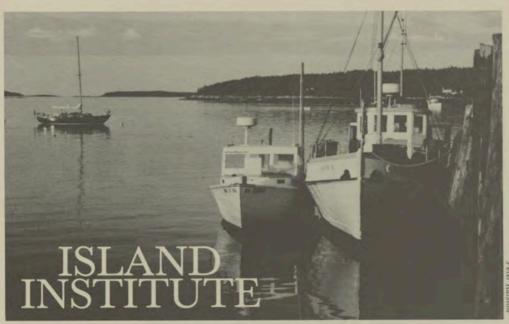
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Douglas Alvord

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From the Director

ear-round island communities persist on dozens of Maine islands along the State's 2,500 mile long shoreline. Although we can and do brag about our nesting eagles, the antics of whales and seals and the hundreds of "deserted" island beaches: it is really the Maine islanders and the resource-based culture on which islanders depend that makes the archipelago wholly unique in the nation. Partly as a result of the 200 mile limit which has put island fisheries back on the map, and partly as a result of in-migration to all coastal Maine towns, many of the islands are seeing modest increase of their year-round populations for the first time in a century; a fact of great significance to island schools, stores, mail and ferry services. Other island communities are still struggling to stay afloat while weathering the tides of change of the late 20th century, which are most obvious as a mini-development boom on the inner Casco Bay islands and a growing interest in second home development of smaller uninhabited islands from Cape Small to Cape Wash.

Because the Maine islands are 95% privately owned, it is a vast assortment of islanders who will decide the islands future with only a limited input (mostly on wildlife issues) from State and Federal agencies. Since no one who has anything to do with Maine islands is lukewarm about the subject, we think the *Island Journal* can play a useful role in scanning the radio waves and monitoring the diversity of island disposition and point of

view. To that end, in this our pilot issue, we have asked 40 men and women of the Maine islands to let us know what is on their minds. Judging from the letters and articles which have poured in from up and down the archipelago, it is obvious to us that the islands are alive and well and very close to the life's beat and pulse of our writers; fishermen and yachtsmen; year-round and seasonal residents; conservationists and cottagers. From these many voices we seek to explore and celebrate the vast variety of the archipelago and report on what -PWC tomorrow brings.

Letter from the Editors

We like island writing for lots of reasons, not least its vitality and individuality. Whether it is a home-grown letter, an academic paper, a narrative or even a broadside, if it has to do with islands in Maine, then it is grist for our mill. We may take out or add a comma here and there, and proofread for spelling, but otherwise it is your opinion and contribution that counts, and these should be expressed in your own way. If you know something about an island or islands, or have strong feelings about them, the expression of it belongs in these pages. And if shyness just will not let you do it, then tell us the idea, and we will chase it down, crediting you with the idea and whatever assistance you can provide in seeing the story into print.

There are scores of topics we think need both special and regular coverage in future issues of *Island Journal*. Here are some:

- Piers, docks, wharves, ramps, floats and moorings.
- Beaches, beach combing, sailor's valentines, and the tide zone. Art and artists.

Hunting and sport fishing.

- Ornithology and bird-watching and local ecology.
- Small watercraft to serve islands. Appropriate technology for islands; wind, solar, etc.

Fire control on islands.

- Well-drilling, digging, and water tables.
- Fields, forests and woodlot management.
- Trail and road-building and wandering in the woods.
- Island gardening and animal husbandry.
- Islands and the law; uses, subdivisions, waste, improvements, etc.

History and archaeology.

Kids and islands.

- Weather lore and storm precautions.
- Unusual and short-lived natural phenomena, interesting events, occasions, adventures, strange occurences.

Two areas need special mention. The course and vitality of commercial fishing is so important to island townships that it deserves its own editorial correspondent in these pages, and we extend a special invitation to people knowledgeable about island fisheries to join us in establishing a thorough coverage of it. Second, island literature confronts us with a wide and deep pool of extraordinary reading, important reading, and the challenge that it presents again requires the help of our readership. We are developing a Maine island bibliography, from which we presume priorities for review will emerge. We can use your help first in suggesting titles that you like and think important, and secondly in reviewing books for us that you especially like. Write us with your suggestions or offers to review books, including the titles, and your address and telephone -GP number.



The Mission of the Island Institute

The islands of Maine are a L national treasure. Few people who are familiar with the spectacular beauty and diverse resources associated with the Maine islands question the likelihood that they will come under increasing residential, commercial and industrial development pressures as we approach the end of the 20th century and the beginning of the next. Sixty percent of the population of the United States lives within a day's drive of the Maine coast. The National Park Service estimates that in 1983 4.2 million people visited Acadia National Park. The deep water off the Maine coast and islands is found nowhere else on the Eastern Seaboard. In fact. Maine is the only place on the Atlantic Seaboard until Rio de Janerio that ships over 40' in draft are able to navigate coastal waters.

At a time, when we as a society are placing unprecedented demands on our thin strip of coastal land and resources, Maine's islands stand out as uniquely underdeveloped. Only one percent of our islands support year round communities, and fewer than 20 percent of our islands have seasonal residences. Today, such species as great blue herons, cormorants, eiders and ospreys nest in numbers approaching their precolonial population levels on Maine islands; and eagle populations are showing encouraging signs of rebounding thanks, in part, to a decade of island acquisitions for wildlife conservation.

But what will happen to the other islands without critical wildlife habitat, and what relationship do the resources attached to those islands have to the economic base of year round com-munities? Because the islands are finite in number and are highly romantic landscapes, the islands' futures will be driven by second home development pressures unless cooperative efforts between the islands' seasonal and year round residents can find ways to maintain some traditional natural resourcebased island enterprises, such as the fisheries, island agricultural, boatbuilding and forestry activities upon which the islands have historically been dependent.

The Island Institute's goal is, therefore, to act as a catalyst to increase communication between the disparate individuals and organizations who care deeply about the future of the Maine islands by:

-focusing increased effort from the *research* community on the resource management and economic development problems faced by islanders, owners, and users.

-supporting exchange of *information* between islanders, island owners, to conserve the values and resources that make the islands unique.

-to sponsor *educational* programs which examine the relationship between islanders and their natural resources in an historical context.

The means to these goals will be achieved by:

-publishing an annual issue of *Island Journal* focusing on historical, cultural and biological information of interest to different island constituencies developing a broad-based membership of islanders, island users, and seasonal residents in the Island Institute.

-organizing conferences to air different points of view concerning the future of Maine islands.

-establishing an internship/fellowship program of research to conduct management oriented research on resource management and economic issues confronting islanders.

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Join Us in the Island Institute

If you care deeply about the human and natural resources of the Maine archipelago, we think you'll be interested in the work of the Island Institute. We also know that for every ten good ideas, there is only a dollar's worth of support available. Since there are 10,000 year-round islanders and another 40,000 seasonal islanders, not to mention tens of thousands more island visitors, the percentages may not look so bad. But if the Island Journal and this appeal for your support languishes in a pile of things you're going to get to someday, we will be just another good idea. There's nothing as telling as the check that didn't get mailed. You can help us make a difference.

For your membership support you will receive:

-The annual issue of the Island Journal



-Benefits of ongoing historical, economic and biological research of Island Institute interns and fellows

-Invitations to Island Institute information programs such as the Annual Planning Conferences and a copy of the Proceedings. (Copies of the 1983 Proceedings are available to new members for \$5.00)

-On site visits from Island Institute staff, research associates and advisors to discuss particular island resource management problems.

-Twenty percent discounts on existing publications:

People and Islands: Resource Management Issues for Islands in the Gulf of Maine. by William H. Drury et al. 210 pp.

Islands in Time: A Human and Natural History of the Islands of Maine. by Philip W. Conkling, Downeast Books, 1981. 222 pp.

Green Island - Green Sea: A Foraging Guide to the Maine Islands. Hurricane Island Outward Bound School, 1980.

Yes, I am interested in becoming a member of the Island Institute

\$7,500 Founding Member \$1,000 Life Member \$500 Guarantor \$250 Patron Member \$100 Sustaining Member \$50 Contributing Member \$25 Subscribing Member

All contributions are tax-deductible. Please make checks payable to: The Island Institute — Hurricane island Outward Bound School Box 429 Rockland, Maine 04841





Island Institute Conference

In 1983 the Island Institute sponsored its First Annual Research Planning Conference at Hurricane Island. 120 island owners, residents, yachtsmen, sea kayackers, naturalists, biologists, historians, economists, fishermen, and realtors got together to share their points of view about the future of the Maine islands. The presentations focused on the following topics:

Maine Islands as Biological Resources Maine Islands as Cultural and **Historical Resources**

Maine Islands as Physical and Economic Resources

(A 100 pp proceedings of the 1983 conference is available to new members for \$5.00.)

The Second Annual Island Institute Conference will be held September 15-16th, 1984, to consider such topics as:

Maine Island Archaeological Sites Maine Island Lighthouse Historic Preservation

The Maine Island Real Estate Market Cruising Boat Use of the Maine Islands

Write to Island Institute Conference, Box 429, Rockland, Maine 04841, if you would like more details.

Educational Programs

The Maine islands today are relatively wild landscapes which have nevertheless, experienced 4 centuries of human use.

Because the islands are isolated from mainland eco-systems, the effects of the past are carefully indexed on the landscape. Ecological differences between islands with different histories are striking. The Maine islands are, therefore, ideal natural laboratories where researchers and students can observe ecological changes in the context of human use, and in the process gain a deeper understanding of our relationship to the natural world.

PEREGRINE MIGRATION PROJECT

This September the Island Institute will monitor the Peregrine Falcon Fall Migrations from 6 offshore island stations.

Students and Earthwatch volunteers are invited to participate under the direction of trained Island Institute interns.

Three 2-week teams of 12 researchers, students and Earthwatch volunteers will participate in the project.

Dates: September 14-28; September 24-October 8; October 4-18

Cost: \$795.00 includes all food, equipment, and training.

Write: Island Institute Peregrine Project, Box 429, Rockland, Maine 04841 for more details.

In 1985 the Island Institute will offer two college-level accredited courses:

Title: Man in the Island Environment Location: Maine islands and the Cabot **Biological Station at Cross Island**

Dates: May 24 - June 21

Cost: \$1,000.00 + \$125.00 Lab Fee Credit: 4 quarter hours

Title: Images of the Sea: Maritime Studies of Maine and Florida Islands. the Florida Keyes plus schooner travel in between.

Dates: September 15 - December 6 Costs: \$3,150.00

Credit: 16 quarter hours

The State of State-Owned Islands

Editor's Note: The Island Institute has received repeated inquiries asking what ever happened to the Coastal Island Registry, the process to settle the matter of which islands are privately owned from those that the state claims ownership. We asked the Bureau of Public Lands to write the following article. The islands under their jurisdiction should not be confused with those islands like Eagle, Jewell, Little Chebeague and Warren which are managed by the Maine Bureau of Parks and Recreation.

Up until the beginning of this century, the policy of the State of Maine was to sell publicly owned islands at auctions. However, the Legislature of 1913, realizing that the State had lost valuable property, passed a law prohibiting the further sale of Stateowned islands. Although some title work was done at the time, the matter of which islands were owned by the State remained cloudy and the matter lay dormant until the Coastal Island Registry Law was enacted in 1973, over half a century later.

The 106th Legislature created the Coastal Island Registry and assigned responsibility for its administration to the State's principal land management agency, The Bureau of Public Lands in the Department of Conservation. The Legislature proposed to determine the extent of public ownership among Maine's 3,000 coastal islands and to clarify the State's interest in often conflicting titles derived from uncertain sources.

The 1973 Act specifically required anyone who claimed to be an owner of an island with fewer than 4 residential structures to register a claim of ownership with the Registry. Each claim was then subject to a title examination, so "true ownership" could be determined. Islands not registered by December 31, 1975, reverted to the care and custody of the State of Maine, until and unless a true owner in the private sector appears.

For the past 6 years the Bureau of Public Lands has worked on title searches on the approximately 1700 islands that were registered and has required registrants or purported owners to submit valid written evidence of title, predating the 1913 law which prohibited further sale of public islands. Such evidence may be a deed, a record of a Maine probate court proceeding, an order of a court of competent jurisdiction or other "authenticated writing which creates, confirms, or evidences ownership" as determined by the director of the Bureau of Public Lands after consultation with the Attorney General.

Of the islands registered, most titles have been found to be valid, but about 200 have been found to have defects revealing the State as the true owner. These "reclaimed" islands will be held by the State and managed for public use with the unregistered coastal islands.

The Bureau of Public Lands also assumed responsibility for the approximately 1300 islands that were not registered as of January 1, 1976. These islands are distributed all along the Maine coast, and in most cases, are less than an acre in size.

In the event that title to any of these islands is established, they will leave the custody of the State.

The Bureau of Public Lands conducted a natural resources inventory of the unregistered islands in 1975, collecting data which included a description of basic characteristics, special natural features, and evidence of existing use for each island. In addition, each island was located on U.S. Coast and Geodetic Survey Nautical Charts to determine the general location of the islands and their accessibility.

Management

A management plan for the unregistered coastal islands was written in 1978, which provides a framework for managing the coastal islands. The plan specifically identifies five broadly defined categories under which the Bureau of Public Lands should manage its coastal islands: bare ledge, salt marsh, shifting substrates, grassy islands, and forested islands.

The plan also identifies islands best managed by other state agencies, private organizations or municipalities by virtue of a special interest or expertise in a particular island's resources. For instance, the Bureau has leased 185 islands to the Department of Inland Fisheries and Wildlife, as many of the small rocky islands which the State now holds are important to wildlife. Other entities that the Bureau has entered into management agreements with are Parks and Recreation. National Audubon Society, the Chewonki Foundation, the Nature Conservancy, and municipal leases with several coastal towns. Altogether, over 350 islands have been leased or transferred to other organizations.

Of the 900 islands remaining with the Bureau of Public Lands, over 60% are bare ledges. These islands will be resurveyed in the future to identify those that are suitable for public use, and specific management plans will then be developed for the islands which have recreation potential. The Bureau will then publish information, presenting a capsule of the formal management plan including a list of those islands available for public use.

For more information about the State-owned coastal islands, please contact the:

Bureau of Public Lands Maine Department of Conservation State House, Station #22 Augusta, Maine 04333

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PHOTOVOLTAICS

In 1979, David Sleeper of Brook Farm, Inc. in

Falmouth, Maine installed Monhegan Island's first photovoltaic power system in the home of Dr. Alta Ashley. Now 18 buildings on Monhegan, including the island's Post Office, collect most of their electric energy from the sun to give the island community the distinction of having the highest photovoltaic power capacity per capita in the United States.

In the early 1950's, scientists at Bell Laboratories first discovered that treated silicon crystals could convert about one percent of the sun's energy striking them to electricity. In the years following this discovery, the silicon panels were made more efficient and took a quantum leap forward when NASA used them to provide power for satellites. But it has only been in the last few years that photovoltaics have become cost-effective for residential uses as an alternative to generators in remote settings in Maine even during the short gray days of winter.

Residential systems like those in use now on Monhegan are not very complex. The collection and transformation of solar energy takes place in silicon panels which are usually mounted on a south-facing roof. These panels are wired to an electrical circuit which conducts the energy through a regulator and into storage batteries. As the electricity is needed, it is drawn from the batteries back through the regulator to the appliances. Although photovoltaic systems produce direct current or D.C. Power while most houses are wired with A.C. or alternating current, this can be solved two ways. A house can be wired with the heavier wire needed for D.C. or an owner can install an inverter which converts D.C. to A.C. The first alternative is more efficient since an inverter can lose up to 20% of the power which passes through it.

David Sleeper, Maine's leading photovoltaic salesman, cites its flexibility as its greatest assets. People who can't afford or don't need a large system can start with one that just runs lights and small appliances. As a family's needs increase, they can add on to the original system by wiring in more panels. Photovoltaics are also easily incorporated into a hybrid system. On Monhegan, for example, the systems are backed up by generators. In other places, wind machines are used with photovoltaics. Another benefit of photovoltaics is their low maintenance costs. The major expense comes with installation. Even a small system can cost around \$6,000 and the larger ones cost several times more. While energy tax credits help (on a \$6,000 system, an owner would get \$2,400 back), the initial investment is still a large one. But once in place, a photovoltaic system is very inexpensive to operate and maintain. The collector panels last approximately 20 years and the batteries, if used properly, can last up to 10 years. The only problem that current owners have encountered is with inverters. Because its parts are fragile and sensitive, breakdowns do occur, making them the weak links in the systems.

While many people believe that photovoltaics will be a part of our energy supply in the future, the costs at present will discourage anyone with access to a local power grid. For photovoltaics to be cost effective in an area serviced by a power company, the costs per kilowatt hour of photovoltaic power must continue to decline relative to public utility power costs. For those Maine communities serviced by Central Maine Power Company which has a 6% stake in the recently cancelled Seabrook II nuclear plant, electric rates are going to rise in real terms. The only question is how fast and how far.

But for islands and other isolated areas already paying 3-4 times the public utility cost per kilowatt hour with a generator, photovoltaics are economically sensible right now. Sleeper recently installed a system on Bar Island in Frenchman Bay for under \$50,000, while the power company would have charged \$135,000 to extend its cables. Photovoltaic systems are in use on about 15 islands along the Maine coast today. Next to the noisy inconvenience of gas and diesel using generators, photovoltaics are one of modern wonders of an island world which can only become more common in the years ahead.

EDITH MEACHAM

Edie Meacham is an intern of the Island Institute.

LUNATIC POWER

s the financial com-A munity joins antinuclear groups in turning away from the apparent false promises, or inappropriate hopes, of nucleargenerated electricity, we must do an about-face and deal with the difficulties presented by the older Newtonian ways of generating power. Acid rain and dead lakes shake an accusing finger at coal, and the atmospheric greenhouse effect at all fossil fuels. Hydro has all kinds of detractors, not to mention the reality that most of the easy dam sites are quite thoroughly dammed, and now happily silting. Wind and solar are still in their technological infancy. Even so, according to one of the nation's most active solar investors, if the nation threw a NASA-type national effort into wind; we could generate all of one percent of the Republic's needs by the turn of the century. There are people working on wave-generated power, on thermal and salinity gradients in the sea, and on various organic conversion schemes - all of them misty and distant as far as our manufacturers of toasters and TVs are concerned. Then, there's this tidal thing.

Ever since the days of Franklin Roosevelt's visits to Campobello Island at the mouth of the Bay of Fundy, visionaries have been scheming of ways to harness the moondriven power of Fundy's incredible tides. Plans to build a series of dams across Passamaquoddy Bay have been proposed and abandoned several times since Roosevelt first imagined them during the days of the WPA. More recently, a tidal project at Half Moon Bay near Eastport, Maine has been proposed by a group of investors. But these schemes and dreams pale in comparison to the Minas Basin Project on the drawing boards at Nova Scotia's Tidal Power Corporation.

The reason that we seem to come back so regularly to tidal power discussions is that the further up the Bay of Fundy you go, the more powerful the tides become, finally rising and falling 50 feet twice a day near the head of the Bay. It doesn't take long for someone to calculate that the power of the Grand Coulee Dam looks like small potatoes next to the mega-megawatts that could be produced by harnessing the world's greatest tidal flux.

Tides, as we have been told since grade school, are caused by the pull of the moon. But the shape of the shoreline and bottom around and over which a tide is pulled greatly influences its height. There are places along the Gulf Coast in the South where the effect of the shoreline and bottom is such as to cancel out one of the two daily tides that most every other coastline enjoys. The Bay of Fundy does just the opposite: it amplifies the tidal surge in magnificent proportions because the characteristics of the bottom and shorelines funnel the sea into a relatively narrow cul-de-sac. The effect is a little bit like sliding yourself back and forth in an old-fashioned high-sided bathtub. The water just piles up on itself until you slide back toward the other end of the tub.

Tidal power dreams in our part of the world have historically foundered on the costs of construction piled on the costs to the environment, particularly to the fisheries. Although the Minas Basin Project is just in its first of three environmental vears of assessments, the impacts to the fisheries of building the world's largest marine structure may be overshadowed by the effects felt by coastal landowners all along the perimeter of the Gulf of Maine. A computer simulation of the effects of constructing 5 miles of dams across the Minas Basin by Nova Scotia's Bedford Institute of Oceanography suggests that the average tidal range along the Maine, New Hampshire and Massachusetts coasts would increase by a foot. High tides would be 6 inches higher and low tides 6 inches lower.

Such an effect might well mean increased clam production, but it also raises the possibility of increased beach erosion and storm damage, accelerated loss of coastal and island archeological sites, not to mention the collective loss of tens of thousands of acres of shore frontage to coastal and island landowners. We expect, if the Minas Bay Project actually gets to the drawing boards, that landowners along our coasts will take an active part in the discussion of the anticipated environmental effects. Stay tuned.



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ALONG THE ARCHEPELAGO



The Islander Jamie Wyeth

© 1975 Jamie Wyeth

ON THE LAMB Raising Sheep on Maine Islands By Peter Ralston

For untold centuries shepherds have used fences, walls, sentries and dogs to create ovine islands of safety in a world that often seems perfectly designed to ensure the elimination of sheep as a species. Sheep ungratefully manage to strangle themselves in the very fences erected for their protection, and break delicate legs trying to crest imperfectly designed walls. Sentries have been known to augment low wages with the occasional marketing of property that isn't really theirs; and sad to report, man's best friend is often a sheep's worst enemy. While working sheep dogs have deservedly untarnished reputations as defenders of the flock, even the most flaccid, hearthridden slipper fetcher can become a slathering and wanton killer when confronted by the hopelessly enticing spectacle of a few bleating sheep.

The same world that makes life difficult for sheep is even more trying, if not always as fatal, for those in the sheep business. Ever mecurial markets, high overhead, and the unremitting spectre of disaster in the fields or pens quickly separate the real shepherds from the backyarders. Maine shepherds are faced with late springs, early winters and the highest investment per-poundto-market in the country.

There are potent advan-tages from an island owner's point of view for considering a flock of sheep grazing on an island pasture. In traveling around the Maine islands, one repeatedly hears the lament, "We used to be able to walk to the other side of the island." Most of the islands were, as a result of farming, quarrying, ship building and wood cutting enterprises, quite open. In fact, turn-ofthe-century photographs make many of the islands look down-right bony, with bedrock cropping up through an island's thin soils.

Island abandonment in the 20th century has resulted in an abundance of islands whose predominant cover now consists of even aged, mature spruce and birch forests with alders and raspberries choking ever shrinking, overgrown fields. While such growth may be beautiful from the water, it makes foot passage across an island an ordeal best accomplished on one's hands and knees. The shallow rooted, over mature spruce are increasingly susceptible to major winter storms; and aerial reconnaisance of the islands shows a tremendous amount of annual blow down. Not only impossible to walk through, blow downs constitute a serious fire danger and waste an enormous amount of marketable wood.

Islands, however, seem to be absolutely made for sheep. If a shepherd can buy, borrow or lease an island; high-dollar, back-breaking fencing immediately becomes an unpleasant part of one's shepherding past. The surprisingly provident shores of Maine's islands are "fences" that need no repair, are virtually dog and coyote proof and actually give sheep a decided edge during potentially deadly North Atlantic winter gales. When snowcovered meadows ashore are frozen solid and it's time to dip ever deeper into savings to keep the flock fed, offshore sheep are able to continue foraging on islands that receive less snow and ice because of the moderating influences of salt water. The winter sea is no picnic at 40 degrees F., but it's still a lot warmer than a barnyard on the mainland. In the intertidal zone sheep forage on high protein kelps and rockweed and they find excellent refuge in an island's thick undercover that seems so impenetrable to us. Frequent thick fog enhances optimum growing conditions of a number of choice forage varieties and incidentally makes for remarkably fine wool.

For many of these reasons Maine islands once produced a significant amount of wool and meat both for local consumption and export. Even after Maine and New England agriculture fell on hard times in the 1870's, island sheep held on. Islands like Monhegan, Criehaven and Great Duck supported flocks of between 300 to 500 until well into the 20th century. Due to the alternate cycles of wetting and drying of fleeces, Maine island wool brought a premium when sold to New England textile mills. Collectively the Maine islands supported a coastwise flock estimated at 20,000.

No island was better known for its flocks of sheep in the late 19th and early 20th centuries than North Haven. Because Waterman's Store at the town landing did a thriving business with the S.S. Pierce Company of Boston, buying fine foods delivered by steamer during the summer; it was only natural that North Haven lambs began making the return trip on the S.S. Pierce



Penobscot Bay island sheep

boat. To this day in Boston's Back Bay there are fine cooks who remember specifying nothing but North Haven lambs for Sunday dinner.

Although today Maine, like other New England States, imports about 90% of the food it eats, there is an increasing awareness among a broad spectrum of people that many of the rural values cherished as a state and a region — the quiltwork texture of a field and forest landscape; the values of husbandry, providence and hardwork — are intimately tied up with the agricultural past. And yet for most of the last 4 decades, Maine, like the rest of New England has been losing family farms at an alarming rate. As you read this, there are 3 fewer farms in Maine than there were yesterday.

At the same time that the tide is falling for most Maine agriculture, there are some counter currents running in the land. All across New England on stony hillside pastures the economics of raising sheep are beginning to be reexamined. In light of rising trnsportation costs, a significant shift away from western dominated sheep farms toward New England lamb and wool is a distinct possibility.

Perhaps no one has thought as much about the ups and downs of Maine's sheep raising potential as Peter Hagerty of Kezar Falls. It has taken Hagerty 8 years of shepherding's ups and downs to acquire a more philosophical turn of mind when it comes to Maine sheep. Hagerty possesses that fine combination of curiosity, determination, humor and inventiveness which embodies the best of classic Yankee enterprise, and he has directed his considerable talents to the host of problems shared by the Maine shepherding community. At the heart of the matter are the crushing expenses of fencing the pastures and feeding the flock which is where we can begin talking about islands.

Hagerty heard an Island Institute address at the Southern Maine Sheep Breeder's Association meeting in October of 1983 that stirred his imagination. Island Institute Executive Director, Philip Conkling was there to discuss the potential of sheep as an island management resource for island owners, and Hagerty was quick to see the possibilities from a sheep producer's point of view. The two sought each other out after that first meeting and began to discuss the feasibility of initiating an Institute-funded program of applied research into the myriad issues of sheep on islands.

Hagerty, who also has a forestry background, is helping to develop a plan of island management that has its cornerstone turning problematic over-mature forest land into open meadows. Once an owner's management program has created a more ecologically and aesthesically appealing open space, the thorny issue of keeping these lands open quickly comes to the fore. Chemcial controls are undesirable for many reasons and ongoing manual labor is generally too expensive for any but the smallest areas. Sheep do an impressive job of controlling new growth and, as part of a well considered land management program, they are compelling option in many specific island cases.

For sheep raisers to get seriously interested in the possibility of managing sheep on Maine islands again, some of the methods and madness of island sheep raising will have to be rediscovered. How many sheep can be run per acre? How much do they forage out of the intertidal zone? Are year round or temporary flocks the best alternative? What breeds will work best? How can sheep raisers develop better local markets? Although answers to questions like these are not known, the Island Institute is working with sheep breeders like Hagerty and others to relearn what was once second nature.

Of Maine's 3,000 islands there are several hundred capable of sustain-



Shearing season

ing flocks of more than 40 to 50 animals. Of those perhaps only a dozen currently have sheep on them. The logic behind evolving a plan for putting sheep on islands is based on marrying a pragmatic island field management program with the historic economic advantages of offshore shepherding.

One of the most important keys to unlocking the secret of using some of Maine's islands for sheep again lies in determining which breed or combination of breeds is most suited to the special conditions of Maine's islands. Luckily, large and locally adapted flocks have survived on a few Maine islands, almost unchanged for the past century on such islands as Nash off Cape Split; York off Isle au Haut and on a few islands in outer Penobscot Bay. If Maine island sheep raising is to take its next step, highland sheep raisers will need to cross mainland breeds with the genetic stocks which have been preserved on islands like these.

The other route for creating a breed suited for Maine islands is to create an island breed out of existing low maintenance mainland breeds which is what Konrad Ulbrich of Warren, Maine proposes to do. Over the last decade, Ulbrich has built up a flock of 300 Scottish Blackface sheep on his Warren farm. But now he has run out of pasture on the mainland and it is not economic to buy more. But there are islands a few miles offshore where owners are interested in maintaining the open land which remains, as well as opening more. Ulbrich, therefore, has decided to cross his Scottish Blackface sheep with a Hexam Lester to get larger, quicker growing lambs and then cross these sheep



Peter Hagerty

with a Suffolks ram to get desirable meat animals. This summer Ulbrich will be putting a hundred sheep out on 3 islands off Port Clyde.

It is an inescapable fact of life that sheep demand a large amount of responsibility, if not plain hard work, but there is an intangibly special feeling about being on an island with sheep aboard. To round a point on a foggy day and see wraithlike sheep feeding above the sea is a fine experience. If one is not a vegetarian, dining on island lamb in the middle of a shore-bound winter is an almost equally satisfying event. Hagerty and Ulbrich know full well that most island owners will prefer not to become practicing shepherds so each in different ways and with different goals is evolving a managerial scenario that will spare the owner from the logistics of shearing, lambing, feeding, transportation and marketing. Their intent is to try to get sheep onto appropriate islands and to experiment with both the practical and aesthetic values of offshore life; moveable feasting, if you will.

Peter Ralston, our photo editor,

with credits in Geo, Smithsonian and Connoisseur, has been photographing island sheep for several years. Tired of waiting for a writer to put the story to words, he wrote it himself.

WHAT IS A CONSERVATION EASEMENT?

What do Witch and Fog Islands 50 miles and several bays apart, have in common? Not size, shape, relief, current use, proximity to mainland population pressures, nor ownership. The binding tie is that both of these uninhabited islands are protected from overdevelopment by conservation easements held by Maine Coast Heritage Trust.

Witch Island

Witch Island is a rocky outcrop of 18 acres, thickly covered by mature, mixed-growth forest. Located about one mile north of Christmas Cove in Johns Bay, the island is a natural haven for wildlife amid the settled areas of South Bristol. Osprey roost on the island and shorebirds wade on its quiet beaches.

Witch Island has not always been known by its current name. Early settlers called it David Island. But around 1910 it fell into the hands of the "Witch of Wall Street", as Grace Courtland Chittenden fancied herself, and the name stuck. In the 1920's and 1930's the island was used as a summer retreat complete with a main house, study, boat house and dock.

From the Great Depression through 1964, when Jane Sewall bought it, Witch Island was virtually abandoned. For the last 20 years, however, the island has been cared for with sensitivity and vision. Sewall demolished the dilapidated, old buildings and built a small camp for seasonal use. Her 12-by-15foot cabin is now virtually the only structure on the island.

Fog Island

Fog Island, 2 miles northeast of Isle au Haut, is remote by contrast, far from the settled environment of the midcoast mainland. The eastern exposure of its only anchorage offers no quarter from winter seas surging in over the surrounding ledges, and strong tidal eddies outside the cove make for hazardous navigation at any season.

Nevertheless, this 80-acre island provides a remarkable variety of plant and animal habitats, including wetlands located behind cobble barrier beaches, spruce-fir forest, hardwood forest, open meadows, fresh water springs, and a fresh water pond. Mink make their home here, and migratory waterfowl return annually to nest on the island. Fog Island is the closest vegetated island to Green Ledge, which is the site of one of the largest colonies of black guillemots on the east coast of the United States. A great diversity of coastal waterbirds nest on the islands surrounding Fog.



Charles McLane in *Islands of the Mid-Maine Coast* reports that Fog Island was used for grazing, pasturage and timber dating back to at least 1873, and a homestead was established in 1880. Sheep grazing has been the only continual use of the island for the past 80 years, but reforestation is gradually closing in the meadows.

Conservation Easements

What makes Fog and Witch Islands special is that their present owners recognized both the importance and the benefits of granting conservation easements to protect their islands' natural and scenic qualities. These easements, granted to Maine Coast Heritage Trust, keep the islands in private ownership, but contain legally enforceable restrictions over how the land may be used. No quarter-acre house lots and other kinds of inappropriate development are permitted. However, as private property owners, the landowners retain all rights which are consistent with the easement, including the rights to control access and to convey the property. Yet by granting easements, the landowners achieved the satisfaction of leaving a legacy of natural beauty and wildlife habitat along the Maine coast.

Both the Fog Island and Witch Island conservation easements allow for the limited development of the islands and thus do not preclude their use and enjoyment by people. On Witch Island, 18 acres were set aside as a natural area, and a small, two acre development area was established in which a singlefamily residence and accessory structure may be maintained. These buildings may also be used for nonprofit environmental education.

The Fog Island easement similarly allows construction of a single-family residence but insures that most of the island will not be built on. Natural resource-based commercial activity such as timber harvesting, sheep grazing, fishing and aquaculture may also be conducted on the island so long as they are not environmentally destructive.

Maine Coast Heritage Trust accepted the Fog Island conservation easement in order to pass it on eventually to the Isle au Haut Land Conservation Trust, which was being organized at the time the landowner wished to make the gift. Recognizing that the longterm stewardship of land is often best left to people who are close to the land and for whom the land is part of familiar and cherished landscapes, Maine Coast Heritage Trust helps local land trusts in coastal communities establish themselves. With an easement on Fog Island, the residents of Isle au Haut will have the start of an active program to guide development in the town through private land use controls.

THE MAINE COAST HERITAGE TRUST

Accepting conservation easements marks the beginning of a new era in land conservation for Maine Coast Heritage Trust ("MCHT"). Established in 1970 "to conserve the natural environment of the islands and coastline of Maine," MCHT during its first 12 years acted primarily to negotiate easements on behalf of other conservation organizations and landowners. MCHT's specialized expertise helped landowners protect over 15,000 acres of Maine's coast through more than 200 conservation easements granted to other organizations such as Acadia National Park, The Nature Conservancy, National Audubon Society and the Maine Department of Inland Fisheries and Wildlife. These easements protect over 80 Maine islands, large and small, and are an important element in the overall pattern of conservation along the Maine coast.

While MCHT's established role as a consultant and intermediary will continue to be one of its major activities, accepting conservation easements will enable MCHT to take a stronger hand in coastal conservation. By working in direct partnership with landowners who care about the long-term impacts of land use on their properties, MCHT is beginning an enterprise which will help the coastal landscape bear the strain of increasing use and demands. As population pressures increase, the need for a variety of approaches to land conservation in Maine grows in importance. Maine Coast Heritage Trust's longstanding commitment to protecting the coast through the initiative of its private landowners will continue to find an important place in the overall effort to preserve the natural heritage of Maine's magnificent coast.

DAVIS HARTWELL

Dave Hartwell is the Executive Director of the Maine Coast Heritage Trust, which has offices in both Northeast Harbor and Falmouth, ME.



MAINE'S ISLANDS OF LIFE

The 3,000 or so islands along the Maine coast range in size from small, unvegetated ledges to dramatic Mt. Desert. Each is unique and, from an ecological perspective, many are highly significant.

The Nature Conservancy, a national nonprofit conservation organization, is dedicated to the preservation of this country's most significant natural areas, especially those sheltering rare or endangered species. By their very nature, the isolated and sometimes harsh environment of Maine's off-shore islands make them ecologically special, so it is not surprising that the Conservancy has taken a major role in the preservation of Maine's island resources.

In fact, The Nature Conservancy is now the largest single private owner of islands in the State, and has helped protect all or part of 67 islands from Kennebunkport to the Canadian border. With the launching of the *Islands of Life* campaign last August, the Maine Chapter's most ambitious land protection project ever, the Conservancy is hoping to add 6 additional island sites to this impressive record of coastal conservation.

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The Maine Chapter of The Nature Conservancy was formed in 1956 by famed ecologist-writer Rachel Carson and several other dedicated volunteers. Carson's research and concern about the accelerating development of the Maine coast inspired the Chapter's early leaders and volunteers to concentrate their efforts there.

With the government all but out of the land acquisition business, the Conservancy has been working hard to identify and protect Maine's most ecologically important sites before they are lost to other uses. Several of the *Islands of Life* parcels were being actively marketed for summer home development before TNC was able to reach agreement to purchase them for conservation. In this way, a highly productive eagle nest and a major colony of nesting eiders were saved from certain destruction. The Islands of Life campaign is a \$610,000 effort to purchase eight spectacular natural areas, six of which are on coastal islands. The islands range from Blue Hill Bay, just west of Mt. Desert, into Washington County's Machias Bay, and include vital nesting sites for American bald eagles, great blue herons and literally thousands of seabirds, as well as several unusual sub-arctic plant communities.

Among the Islands of Life are:

Northwest Head, a 130-acre peninsula on Machias Bay's Cross Island, and the only part of this entire 1,500-acre island Archipelago (which includes Cross and six associated islands) not previously protected. Cross Island was acquired in 1980 by The Nature Conservancy and transferred to the U. S. Fish and Wildlife Service for their longterm care.

Salt Island, the western half of a key and highly productive raptor nesting site in Machias Bay. Salt also features a magnificent stand of old growth timber.

Ship Island, one of five low, shrub-covered islands west of Mt. Desert in Blue Hill Bay, which the Conservancy has been acquiring to protect their nesting seabirds.

Mistake Island, a spectacular 30-acre haven for rare plants, and a popular Western Bay sailing destination, which features a Coast Guard lighthouse on its southern tip.

Upper Birch Island, home to nesting bald eagles and great blue herons in the Pleasant Bay - Narraguagus Bay region.

The sixth island is a magnificent rocky headland in Washington County which contains several very rare plants. (Because final negotiations for this site are still in progress, its specific identity is being kept confidential.)

Like the rest of the Maine Chapter preserves, these islands are generally open to the public for day-time, recreational use. However, visitors are asked to avoid those areas which support nesting birds during the early summer breeding season. Just one human disturbance at the wrong time has been known to drive courting eagles from their nest for the entire summer.

Though certain islands are closed to human visitation during the nesting season, other TNC preserves are popular throughout the summer. Damariscove Island, five miles south of Boothbay, is one of the most frequently visited islands on the entire coast. Caretakers are on Damariscove all summer to answer visitors' questions and interpret its fascinating natural and human history.

Other popular Conservancy islands include Basket Island in Casco Bay, Big Garden and Big White Islands off Vinalhaven, Wreck and Round Islands in the Deer Isle thoroughfare, and Great Wass Island, a 1,500-acre preserve south of Beals. All are easily accessible by boat (Great Wass is also connected to the mainland by a bridge).

As development pressures accelerate, it is important to protect those few special islands which contain the best examples of Maine's unique natural heritage. Through the efforts of The Nature Conservancy and other dedicated conservation groups, these unique islands will remain available for generations to come as quiet havens for wildlife, and for ourselves as well.

(More information on The Nature Conservancy's island preserves, and the Islands of Life campaign, is available from the Maine Chapter office: 20 Federal Street, Brunswick, Maine 04011 phone: 207-729-5181)

KENT WOMACK

Kent is TNC's Associate Director working out of 20 Federal Street, Brunswick, Me. GOD'S TUGBOAT

SUNBEAN

Editor's Note: No islands publication could even pretend to completeness without regular word from the Maine Sea Coast Missionary Society. As islanders seek the spirit of islands, the Society comes to islands to serve the Spirit. For many years the Maine Coast Fisherman, and later the National Fisherman which subsumed it, carried the Society's column, "God's Tugboat," a title we are pleased to resurrect here in honor of their eight decades of the finest kind of Christianity along the coast.

Douglas Alvord

As might be expected, the very existence of island people centers around boats. Their lives and life-styles depend upon boats of one kind or another. It is a boat that brings the mail to many of the islands. Friends and loved ones visit by boat. Groceries and provisions arrive by boat as do necessities and luxuries. Their work boats are the instruments of their livelihood and the basis of the island economy. And it is through the symbol of the Mission boat SUNBEAM, that the love of Jesus Christ and the grace of God is made more real.

The Mission boat delivers the Mission minister to each of eleven islands and his work is much the same as any minister on the mainland: conducting worship, officiating at weddings and funerals, baptizing, making pastoral visits, rejoicing with families in their celebrations and bringing comfort to individuals and families in their hardships and grief.

The Maine Sea Coast Missionary Society began in 1905 as an inspiration of two brothers: the Revs. Angus and Alexander MacDonald. At the time both of them were serving churces on Mount Desert Island - one in the Congregational Church in Bar Harbor and the other in the Congregational Church in Seal Harbor. They realized that there were a number of the offshore islands with populations too small to be able to afford a resident minister. One of the brothers through a short experience on one of those islands knew that the people there had appreciated his ministry and the spiritual guidance which he offered.

They pooled their money and bought a 26 foot sloop, engaged a "minister-missionary-mariner" and sent him out to offer such spiritual guidance to the island people. Captain Henry E. White ranged along the coast visiting islands and a few isolated mainland villages. He soon discovered that the people were most pleased to have someone who would offer spiritual guidance, and he also discovered that there were other things of a very practical nature that the islanders of those days would surely appreciate.

Practically all of the islanders' necessities were met by the work of their hands: vegetables from their gardens, fish from the sea around them, sheep for wool and meat, poultry for eggs and meat, and cattle for milk and beef. Those willing to use their time and muscle fared quite well. But actual cash was in short supply, and cash was needed for clothing not made from wool, and other items such as reading materials, which they could not produce themselves. So Captain White put aboard the little sloop recycled clothing which he gathered from some of the local people, books and magazines, and he distributed them along his route. It was in the same spirit that Mission workers instituted the Chirstmas program through which new items of clothing, small story books and a box of hard candy were given to each of the island children at Christmas time. The recycled clothing program and the Christmas presents (some 2,400) are still being distributed by Mission workers.

The sloop, named HOPE, was replaced by a motor launch in 1907, the gift of summer residents which enlarged the scope and ministry of the Mission to the offshore islands. And then in the year 1912, the first vessel named SUNBEAM was launched in Camden. She was 57 feet long and suited for year-round travel. The second SUNBEAM was launched in 1926, from the Morse Shipyard in Damariscotta. The third vessel of that same name was built in 1939 at the Harry Marr yard in Damariscotta and finally SUNBEAM IV was launched in 1964 at Warren, Rhode Island. SUNBEAM IV is the first Mission vessel built of steel and is still in use. It is 65 feet long, 18 feet wide, and draws 71/2 feet of water. Its operating crew consists of Master, Engineer and Steward. Mission ministers and other workers are taken to visit the islands between the Cranberry Isles and Loud's Island in Muscongus Bay.

The culture of the islands has changed considerably since the beginning of the Mission. There have been many things which little by little have brought progress to the islands, including ferry service to five of the islands in our service area; adequate mailboat service and in some cases mail delivery by airplane; electricity; telephone service to most of the islands and CB radios to others. Everyday life for the islanders does not differ radically from life on the mainland. But the Mission vessel continues to find that the people appreciate deeply an organization, a group of people, and a dedicated minister who visit their island ready to fill their pastoral needs, their spiritual needs, and whenever possible, their practical needs.

The Mission has helped to place and maintain full-time ministers on four of the larger islands: Swan's Island, North Haven, Vinalhaven and Islesboro. These communities have had ministers serving them for many years, but with the help of the Mission they can continue to be served by qualified pastors. The smaller islands are still being served by the Mission vessel which makes visits each month to 9 islands in the winter and 11 islands in the summer. The work of the boat minister centers around visitation as well as officiating at baptisms, weddings and funerals.

Because of the long tradition of the Maine Sea Coast Mission's service to island people, it is inevitable that our hearts are deeply imbedded in the people, their lives and fortunes, their joys and sorrows, and their frequent struggles to maintain themselves and their way of life. For most of the islands it is the fisheries that are the basis of the economy. On other islands it is the summer residents who add mightily to the economy. And on still other islands there is a comfortable blend of fishing and serving the summer residents.

For the most part the big island gardens, the flurry of canning the products from the gardens, the drying and preserving of fish and meat products, the spinning and knitting of wool for clothing, and the reliance on total muscle power of both humans and animals has disappeared. Electric motors and internal combustion engines are in practically universal use, and with that a reliance on petroleum products with ever-increasing costs of those items. This condition is making for difficult situations for many of the islanders. It is not possible to see very far down the years to the kind of life-styles which will be available to those whose lives and love center in their native or adopted islands. But whatever the circumstances, the Sea Coast Mission intends to continue its service of practical Christianity to the people of its extended parish.

THE REV. STANLEY HASKELL

Stan Haskell conducts his pastoral ministry out of the Maine Sea Coast Missionary Society's offices at 127 West Street, Bar Harbor, ME 04609. They say no man is an island, but Robert 'Bo' Curtis, a 25 year old clamdigger from Waldoboro had an opportunity to consider the exact meaning of the phrase this winter from the smallest of Maine's islands, the 8 foot Bay Ledge Buoy 6 miles south of Carver's Harbor on Vinalhaven.

Oh, Buoy-Saved by the Bell

On Sunday morning around 10 o'clock, January 15, 1984, Bo Curtis launched his 15 foot, 40 horse outboard in Rockland and headed across Penobscot Bay for Kent Cove in the Fox Island Thorofare to dig clams. The marine forecast called for sunny skies and 10-15 knot winds. Part way across the Bay, a blinding snow squall roared over the water obscuring his visibility. As the seas built, Curtis' outboard began taking on water forcing him to bail. Between the 35 knot winds and his efforts to keep the boat bailed, Curtis was blown off course. Twelve miles off course. Late that morning, with temperatures falling into the single numbers, Curtis saw the Bay Ledge Buoy. Planning to tie up to the buoy until the wind let go, his outboard was swept out from under him, leaving him clinging to the buoy and beginning his ordeal by cold.

At 6:05 that evening a friend reported Curtis overdue to U.S. Coast Guard Rockland Station. The Coast Guard dispatched its 41-footer to search among the islands for Curtis or his boat. Later the 82-foot *Point Hannon* from Jonesport and the 110-foot tug *Yankton* from Portland joined the search as did a Coast Guard helicopter from Cape Cod.

With waves sweeping the Bay Ledge Buoy, Curtis was quickly soaked except for his lower legs which were covered by rubber boots. Curtis took off his down vest to sit on so he wouldn't freeze to the metal buoy, and he tied his belt on the rim of the buoy to give him the option of walking around the buoy to keep his circulation going. As darkness fell Curtis began tearing off strips of rubber from his boots with his teeth. Drawing his knees up under his sweatshirt, Curtis lit the boot strip rubber with a Bic lighter to generate a few degrees of heat. Every two hours he burned another strip.

Douglas Alvore

At some point in the middle of the night, Curtis heard the roar of a helicopter engine and a spotlight momentarily lit the buoy. It was the Coast Guard helicopter, but by the time he got to his feet it was gone. By dawn Curtis was demoralized after living through the longest night of his life.

The Coast Guard continued its methodical search and near 2 PM, 27 hours after he first 'landed' on Bay Ledge Buoy, the *Point Hannon* spotted the stranded Curtis and picked him off his wind and wave washed perch. A helicopter quickly flew Curtis to Eastern Maine Medical Center in Bangor, where except for some frost bitten hands, Curtis was found to be in good condition.

It may be small consolation for Curtis but a certain amount of celebrity has followed his icy ordeal. Already Curtis has appeared on the Today Show to tell his story, and there are rumors that Bic lighters might be interested in a testimonial. Indeed.

FISHING

Mike Brown's sor



There is just something pure about a father fisherman teaching his son the lessons and pride of his livelihood.

In a world gone awry with the tarnished values and tinsel-wrapped affection and parental confrontations, it is a heartfelt sight to see sons of fishermen following fathers along wharf paths and aboard boats that take them together, upon the sea, the profiler of true virtues.

Damn, double damn; if the work called fishing-for-a-living is headed for hell in a scale basket, then it's not the fault of the salt main of Maine where there is still the fatherson equation heritage that is alive and nearly well. Oh sure, times change, the cotton has turned to nylon, the cedar to plastic, the makeand-break to turbo charged and real money to script catch-of-the-day. But it seems that in the hearts and heads of many Maine boy fishermen there is the same devotion and respect for their father teachers that were there when the times were harsher, the seas bigger, the boats smaller, the soup a little thinner.

I remember growing up on the coast of Maine as a boy weir fisherman. My dad, the Old Man of my life, weaned me from my mother even before the teachers staked their Three R's claim to my small body. By the time I entered the regime called school, the Old Man had taught me the ways of fish as they made their mysterious and silent Odysseyan journeys to and from lands way beyond my comprehension. It was there, the Old Man said, in places where the icebergs calve and toothed walrus dig clams; and big, hairy white bears lie like pouncing cats beside a seal hole in a manless white bay with no name that fish came from.

The Old Man taught patience when only a few fish were reward enough. Sitting there on a cold weir pocket frame on early April mornings with only the wind child, born of land and sea as a companion to us, the Old Man would teach by silence.

I, the boy fisherman and a student of the times, would have my hands down inside my worn rubber boots as they were cold from the breath of the cross child. And my hand-knit collar sweater would be cinched high with a big blue moon button found and claimed from an abandoned attic sewing basket. And overall, Christmas present oilskins now mottled yellow with rutted work lines creased like country roads across a giant field of wheat.

I would cuddle closer to the Old Man and feel his comforting warmth — a presumtious move of emotion. It seemed the thing to do. And when the wind and cold and grey, sunless emerging light would become unbearable and threaten to defeat my defiant stance, the Old Man would say, "Look, look down there, did you see it?" I would uncoil like a spring and stare no less intent than a fishhawk into the grey steely waters of the weir pound.

"There, swimming this way, flashes," the Old Man would say. And I would see them, signs like the scratching of big, wooden matches to light the kitchen kerosene lamp that would begin the new fishing day. I saw them! I saw them!

The Old Man would usually say, in those first run of herring April mornings, that there were too few to seine but, son, they were coming, the fish were surely coming and tomorrow will bring more to our small cove herring weir of wooden oak stakes and straight ash ribbons and white birch brush. There was always the better tomorrow.

It was mostly work; work-work and play-work or learning-work. My Old Man thought two people working on the water should be a partnership, no matter the age chasm. There was a boss, for sure, and the boss's helper; but it was a structure of equal trust and rewards and disappointments. Our investments may have been relative but the profits, and losses, were divided equally. One for he, one for me, and one for the old weir.

I remember the years that the herring never came in April. We ate a lot of shortbread and pork scraps. The Old Man sure could make shortbread in that black, flat oven pan heated in a Clarion kitchen stove stuffed full of dry alders. And black coffee. I bet I drank more coffee grounds before I was ten than most ashore kids drank milk the rest of their lives.

When the herring didn't come, the mackerel had to. The Old Man wished them in. Wish the mackerel would hit tonight, he'd say at suppertime. Wish they would to, I'd wish.

Then, one of the days of late June, the mackerel obliged our wishes. There they'd be, swimming around the weir, puffing out their silvery gill plates, looking tuckered and tired from their long swim from way there to way here. Up past that faraway island that looked like a black bowler hat. That island, the horizon of my weir world.

How I loved to catch mackerel! The Old Man and me would unreel the sweep seine from the scow. It reminded me of when the Old Man made special marblecake and folded the batter from the bowl to the baking pan. Like a cattle roundup, we'd herd the mackerel into the weir pocket and then dry the twine and bail the irradiant green striped fish into the cory where they'd pound the cedar planking in tatoos of death. I felt sorry to end their Odyssey.

Ashore, the fish peddlars in old pickup trucks with wooden boxes in their aft pouches, like kangaroos, would be waiting. How I loved fish peddlars. The Old Man and me would lug the fish up the shore flats in peach baskets with stove pot holders stuck in the wire handles so they wouldn't cut our hands. Sometimes the peddlars would laugh and speak in Italian or French and ruffle my hair. The Old Man would laugh and punch me gentle on the shoulder. I'd laugh, too. I thought - maybe I'll be a fish peddlar when I grow up. I'd tell the Old Man that later and he'd ask me to say mackerel in Italian. I couldn't.

We grew and shared, the Old Man and me; neither knowing that our lives were being played on similar stages, with like actors, all across the fishing theater in which we all together existed.

There were calm summer mornings when waiting for the tide we skipped flat rocks for a penny a circle and the Old Man won only half the time on purpose. There were full moon nights when the Old Man and I sat on the shore and listened to the returning herring rush across the cove sounding like rain on our shingled roof and we couldn't sleep that night waiting for the morning that would bring us a full weir. And the morning gave us emptyness.

There were precious father-son overnighter picnics on that stranger island across the bay reached in our fishing dory and its seldom used spritsail power. Once or twice a year we'd do that. Days of no fish, no work. We'd build a fire of coals, which is a fire died down, and roast fat, squirty new-dug clams in their juices. And the Old Man would batch together his ever-present shortbread ingredients and cook the sheets beside the coals fire in his homemade reflector oven. We'd lie under bleeding stars and talk about fish until I fell asleep under the olive drab wool of the U.S. Army.

Boy fishermen learn the Bbad follows the good and the abundance precedes the lean. There were days of joy and nearly uncontained exuberance when I accompanied the Old Man to the sardine factory to get our herring check. I would sit shyly in the big office chair with the missing foot rung and pick dry scales from the too-big seat while the Old Man talked twine with the factory boss. The office girl would wink and I would blush.

But there were the days of Christmas, and Christmas comes every year when the fish don't, and the Old Man and I would do our shopping by walking the streets of town and play our game of whatever-use-would-that-be. It hurt, sometimes, when the presents were the old painted new and the wornout patched fresh. One time though, how I remember, the Old Man made me a pair of skis which he steam bent over a washtub on the kitchen stove right before my eyes. He said they were planks for the dory. I believed him. What a devil he was, that Old Man of mine.

Well, those boy fishing days are all long gone now. The teacher has left, but only in body. The lessons seem to live on.

One morning, it was late September, and the morning light of that month being cruel had driven me deeper into my hand quilted cocoon. The Old Man shook me and said it was time to check the weir for the very last time that year. I sure hated to shed my warmth but threw the covers aside and ran down to the kitchen to dress in front of the woodstove that had been brought to cheerful life by father fisherman. Drinking black coffee and eating a toasted bisquit breakfast, the Old Man looked at me sitting there nearly lost in my wrappings of wool clothes and asked me if I thought I'd be a fisherman when I grew up.

If you will teach me, I replied.

Sage of Saturday Cove; weighty, iron-fisted quaker of Cove Writers Inc.; contributing editor to the Belfast Republican Journal; and creator of Cap'n Perc Sane, Mike Brown is coastal Maine's saltiest writer. Readers of Cap'n Perc Sane may recognize the kid fisherman, Square Knot, revealed here as the man himself.



TRAP LIMITS and the Bottom Line on Swan's Island

The mere mention of the words, "trap limit" among Maine lobstermen is enough to set off something like a religious war. Whether a lobsterman believes limiting the number of traps he can put overboard will help pave the road to heaven or hell, it is not easy to find a fisherman who feels neutral about it. Yet for the first time in the history of one of America's most individualistic, competitive fisheries, an overwhelming majority of lobstermen on Swan's Island who straddle productive lobster bottom between Blue Hill and Jericho Bays, have petitioned the Maine Department of Marine Resources to institute an experiment to limit the number of traps they each can fish.

On October 1, 1984 within a carefully described boundary, a Swan's Island lobsterman and his sternman will be limited to fishing 600 lobster traps; a year later the upper limit will be 500 traps; in 1986 the limit will drop to 450; and by 1987 the limit will have reached 400 traps for a lobsterman and his sternman. For single boats with only one fisherman aboard, the limit will be 100 fewer traps, stepped down in the same sequence for two-fishermen boats.

The idea of a trap limit has been kicked around by lobstermen for a good many years, but it began to be considered more seriously after the Maine Department of Marine Resources sent a questionnaire to 8,500 people holding Maine lobster licenses in the summer of 1982, asking whether they favored the idea of a trap limit. Over 3,200 license holders responded to the questionnaire, and surprisingly 80% favored a trap limit. Later the Maine Lobsterman's Association, which some fishermen feel represents more accurately the views of full time lobstermen, sent out its own trap limit questionnaire and discovered that over 60% of those that responded favored the idea.

The idea behind a lobster trap limit is simple: after a certain point, the more traps a lobsterman fishes

in a limited area, the fewer pounds he will catch per trap. If he continues to put more traps out, production may increase slightly but costs in gear and fuel increase faster. At the end of the year a fisherman's cash flow may have been greater, but his net income is not. And he will have spent less time at home with his family, and will have less to show for his efforts. Sonny Sprague of Swan's Island who has wandered into becoming the spokesman for the 30 to 40 lobstermen on Swan's Island who will be affected by the trap limit puts it this way: "With a trap limit we can catch almost as many lobsters at less cost. The less the cost, the more fishing we will get done. And income tax day will tell whether the idea is any good or not."

Although this scenario reflects the economic realities for a significant number of fishermen who currently fish, say 300-500 traps, it may not be the case for those who fish a big string of 700 or more traps. Some of the highliners on Swan's Island, as in other lobstering towns, are among the most outspoken opponents of trap limits. Whether by virtue of fishing better bottoms, getting up earlier and working harder, tending better gear or simply having an uncanny knowledge of the habits of the canny crustacean; a few fishermen are able to manage the big strings and do well at it. To the highliners who have gotten ahead in the business, trap limits seem like a thinly disguised effort to take income away from them and spread it around among less successful fishermen. Although perhaps only 5% of Maine lobstermen fish strings of 700 traps or more, they wonder whatever happened to getting ahead? In the first year of the experimental trap limit on Swan's Island it will be the 6-7 highliners who will be affected.

The lobster fishery is one of the most intensively harvested marine resources in the Gulf of Maine. Lobsters are fished at or near the

biologically sustainable level. Marine biologists believe that approximately 85% of lobsters of legal size are harvested every year. Another 5-10% die from various causes including disease and predation. This leaves about 5% of the lobsters in any given year to provide the reproductive pool for future harvests. Some lobstermen believe that trap limits will help conserve the resource. In Sonny Sprague's view, "If there are more lobsters left over, they'll reproduce better." But marine biologists are not at all sure that enough fewer lobsters will be caught to have any significant effects on the lobster population in a local area. What seems clear, however, is that the so-called "good bottom" where lobsters like to feed and hide, will get fished harder; and the fishing pressure in marginal areas will be reduced.

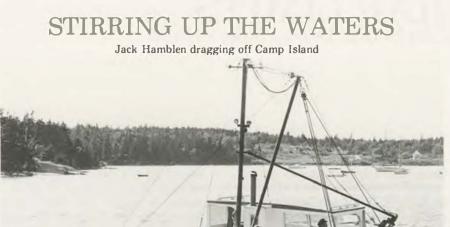
Although there is a dif-ference of opinion over whether trap limits should be viewed partly as a conservation issue, everyone seems to agree that the real crux involves social and economic issues; both within a community such as on Swan's Island, and between neighboring fishing communities. If there is a heated controversy between a highliner and other full time fishermen in a harbor, it is nothing like the heartburn that is created when lobstermen begin considering the effects of trap limits on the prospects of part-time fishermen. Although there are 8,500 lobster license holders in Maine, many of these only fish a small number of traps part-time in the summer. Most close observers of the lobster fishery believe that between 75 and 90% of Maine's lobsters are caught by a thousand or so of the most productive fishermen. If trap limits were instituted on a statewide basis, many full time fishermen believe they would not make more money because part-time fishermen would be able to fill the vacuum created by fewer traps. One of the reasons that on Swan's Island the issue of trap limits has even gotten to the experimental stage is that there are no part time lobstermen to cloud the issue. "We all go fishing here," is how Sonny Sprague puts it.

But if trap limits have any applicability in other fishing communities, the issue of part-time fishermen increasing at the expense of full time lobstermen will have to be solved, or the Department of

Marine Resources' regulations will not be addressing the harsh economic realities of lobstering which are the driving force behind the issue in the first place. In rapidly changing coastal fishing communities of Maine, the large capital investment in gear and equipment a fisherman must make before his first day of fishing is the most effective barrier to entry for part-time or would-be lobstermen. Within Maine island lobster communities like Swan's or Monhegan, however, it is one's fellow fishermen who decide who and how many fishermen will be going to go out to catch a relatively fixed number of lobsters. Therefore, if trap limits are to work anywhere on the coast, it will be in places like Swan's Island where the issues within the community, no matter how contentious, are still simpler to work out and also to enforce than in other mainland fishing communities.

Swan's Island experiment with trap limits has already rippled onto the mainland at Bass Harbor. If Bass Harbor fishermen want to fish anywhere inside the Swan's Island trap limit boundary, they will have to fish the same number of traps as the Swan's Island fishermen. Because of the kind of competition Bass Harbor lobstermen face and the nature of the offshore waters in which they fish, it is unlikely that many of them will choose to participate at all, meaning they cannot lobster inside the Swan's Island trap limit boundary. While such an outcome may mean that Swan's Island will become a more stable and viable fishing community, since lobstering is Swan's bottom line; the same cannot be said for Bass Harbor.

Although many fishermen strongly favor the idea of trap limits in the abstract because it holds out the possibility of a better income for full time lobstermen, it will require the wisdom of Solomon to institute on a broad scale. Perhaps the best thing that can be said of the experiment with trap limits on Swan's Island is that it will only affect 30 - 40 lobstermen, but you can bet 3,000 to 4,000 other lobstermen will be watching the island, its lobsters and their bottom line with a weather eye.



ntil a few years ago, mussels in Maine waters were just something that took up space on good clam flats. Summer people occasionally collected a bucketful for a fancy bouillabaise and Euell Gibbons wrote about how you could live off of blue mussels for weeks on a Maine island, but it didn't really amount to much. This state of mussel affairs prevailed before Frank Simon and his partner Chip Davison formed Great Eastern Mussel and went into business in 1978. In the last 5 years Great Eastern has built a large, carefully designed \$300,000 processing plant on Long Cove in Tenants Harbor, developed nationwide marketing outlets and negotiated 200 acres of mussel leases with the Maine Department of Marine Resources. Maine mussels have made the big time, but not everyone is thrilled about Great Eastern's rising sun.

NORTHERN STAR II

In New England waters mussel production has benefited from the highly successful techniques of aquaculture, the science of growing for market various products of the sea including salmon, oysters, sea trout, lobsters and shrimp. Mussel farming in Maine began with attempts modeled on Spanish efforts to grow the blue bivalve suspended in the water column from ropes attached to floats. But because events like storms, tides, ice and musseleating eider ducks took their annual toil, rope culture of mussels was never wholly successful and Simon

and Davison began to look for other ways of growing mussels to satisfy their increasing market.

After a visit to the Netherlands and Ireland where mussels have been cultured by seeding selected beds for years, the owners of Great Eastern decided to adapt Dutch and Irish bottom culture techniques in Maine.

Seeding mussel beds is based on the same biological principals as agriculture or forestry; that is, the more space an individual organism has free of competition from too many neighbors, the faster it will grow. Carter Newell, Great Eastern's marine biologist who has made a careful study of optimum growth conditions for Maine mussels says that there should be 15 to 20 mussels per square foot of bottom, a fraction of the numbers common in uncultured or wild beds. Not only do mussels on seeded beds grow faster, but if they are carefully located, the filter feeding bivalves also produce a higher quality, sweeter product with fewer "pearls" and a higher ratio of meat to shell. These factors along with careful purging, washing, debearding and grading processes at their Tenants Harbor plant have been the elements of Great Eastern's success.

Once a fisherman has sprinkled the right number of seed mussels on a suitable area of the sea bottom, there's nothing to stop someone else from harvesting the mussels unless an outfit like Great Eastern or a fisherman has an exclusive lease on the area. But leasing the bottom is complicated and involves such things as the Maine Department of Marine Resources, an array of marine biologists, and administrated hearings with lawyers and legal intervenor status for those who oppose a particular lease or leases in general. Decisions about who might fish an area and for what kinds of things — decisions that were once made along the water front or in fishhouses are now made nearer to the Statehouse. And lots of fishermen don't like it.

The law which controls all marine leases, mussels included, specifies that leases cannot be granted by the Department of Marine Resources if they interfere with existing fisheries, like clamming, lobstering, scalloping or wild mussel harvesting; or if they interfere with navigation, riparian rights or other existing recreational or pleasure boat uses. That sounds fair, but at the administrative hearings held to decide if a lease application should be granted there is heated controversy over just what constitutes interference.

Many lobstermen are en-tirely opposed to the very concept of leasing. Scott Vaitones, a Tenants Harbor lobsterman speaking at a Fisherman's Forum meeting in Rockland said, "I feel a lease is very discriminatory because it is making private property out of the public domain. If I had a lease of 200 acres of bottom to the west of Monhegan, I could make a living for the rest of my life, but I can't get one. A lobsterman fishes inside of invisible boundaries that everyone agrees to. So why should a Vinalhaven musselman be allowed to have a lease in Tenants Harbor? Anyway, if a musselman has the respect of the community, he wouldn't need a lease."

Most all leases have provisions limiting the dates mussels can be harvested from a lease to prevent conflicts with lobstermen who may set traps in the area during the summer season when some lobsters crawl up into shallow water on muddy bottom to shed old shells and grow new ones. Since Maine mussels are also spawning during July and August during the lobster shedder season, and are therefore not harvested, there would not seem to be a conflict with lobsterman. But many inshore lobstermen believe that dragging in a lease area by mussel fishermen tears up the bottom and ruins it as shedder bottom. For this reason most of the mussel leases have been granted in areas of very shallow water -2 to 8 feet at low tide - that is too shallow for most, if not all, commercial sized lobster during shedder season.

In these shallow water areas, however, mussel leasing runs up against opposition from clamdiggers like Herb Carter of Deer Isle. In and around the islands of Deer Isle and Stonington, Great Eastern has 70 acres of mussel leases. Mussel fishermen like Jack Hamblen on the Sea Rider II and Bobby Burgess on Northern Star II drag in waters too deep for clammers to dig and too shallow for lobstermen and scallopers to fish. But Carter thinks that dragging for mussels in these waters is destroying clamming. "They're taking the biggest and best clams that we have; the clams that supply the seed for our clams on the flats. A little clam will supply seed, yet a small clam only has a small amount of seed. But the biggest kind of clam will produce millions of seed, and these mussel draggers are dragging in the flats where our big seeders live. The Department of Marine Resources expects us to buy a clam license and starve to death. What's the sense of buying a license if you can't make a living? What do you do in a place like this, on an island out here like this? Clam digging was our well being and now we're cut off.'

Although the Stonington-Deer Isle area has seen a drop in the volume number of bushels of clams harvested, most people, including some diggers believe that overdigging is more responsible for the decline than mussel dragging. Aggravating clammers problems in both the Stonington and the Jonesport-Beals Island areas where there are the largest concentration of mussel leases; is that seed for the mussel leases is more and more difficult to find. Even when leases might be located in an uncontested area, clammers insist there have been cases where seed mussels for the leases have been dragged up off of intertidal flats ruining the area for clamdigging.

To round out the opposition along the waterfront to mussel leases, there is finally the case of two summer residents along the shores of Crockett Cove on Vinalhaven who feel that their ability to set moorings and to catch an occasional flounder will be impaired by Mike Mesko's and Joe Upton's joint lease with Great Eastern. Theirs is not just a token opposition as they have taken Great Eastern, the two Vinalhaven mussel fishermen and the Department of Marine Resources to court to test the constitutionality of the whole aquaculture leasing program.

Back on the Sea Rider II off Stonington, Jack Hamblen winched another haul of his 4 foot mussel drag aboard and dumps it into the cylindrical iron washer. In the mussel business for years with Great Eastern, he has learned to be more and more philosophical about the controversies seeding mussels on leased beds brings down around him. "We're blamed for every catastrophy in Maine but the spruce budworm epidemic, but I expect they're working on that." One of 4 boats in Stonington to have joint leases with Great Eastern, Hamblen works closely with Bobby Burgess' boat the Northern Star II. Between August of last year and mid April of this year, the two boats have sold 38,000 bushels to Great Eastern Mussel Company, 30,000 of which came from their leases. From their point of view, bottom culture of mussels is good business, and the mussels on their leases seem to agree. These mussel fishermen say that for every bushel they seed on a lease, they are able to harvest two bushels of mussels in 6 months time. If figures like these hold up, the mussel potential of Maine waters may only be limited by the number of people who want to eat them and by the availablity of seed.

The Department of Marine Resources figures indicate that there are only a total of 300 acres of mussel leases in Maine, though there are about 160 acres worth of lease applications pending. Wild mussel harvests still exceed the volume of bottom cultured mussels, though the gap is closing rapidly.

It is not clear how or when the waters will settle on musseling's stormy debut. About the only thing that everyone agrees to is that we don't know enough of the ecology of mussel dragging to beat a retreat or send up the victory flag.

RADIO WAVES

News from Offshore

The following dozen columns from some yearround island communities are a sampling of the views from offshore. Although we had hoped to cover more of the waterfront in this first issue, our radio went dead at a critical moment and the transmission is bouncing around out there in space. We are eager to listen to correspondents from those unrepresented islands whose narratives about their communities may be of interest and value to other islanders.

The dozen islands from Beals to Cushings that are represented here are a delightfully eclectic crackle of information which we are pleased to print. We range from way-downeast, all the way back to the west'ard and from the outermost edges of the archipelago to islands tucked up tight inshore. Switching to Channel 16 and standing by.



Beals Island by Brenda T. Dodge

The art of building a wooden boat has always been a tradition and a way of life on Beals Island. Long before 1958, when the construction of a bridge made transportation of lumber to the island an easier task, skilled craftsmen were turning out boats fashioned of oak and cedar. In those earlier days boat lumber was lashed into rafts and floated across Moosabec Reach, or it was loaded on scows and ferried across.

There was a time when more than 14 boat shops could be found along Beals Island's shores from Barney's Cove to Alley's Bay. Demand for the wooden fishing vessel was great and the island's builders were eager to fill that demand.

There is no doubt that the skills of the boat builder were passed on, in some instances, from father to son. But many a small boy, who spent idle hours in a dusty shop during the construction of a cedar-planked hull, grew up with a desire to become a part of the island's boat building industry. Many of the oldtime builders are gone now, but the remaining shops are still fragrant with cedar shavings and wooden hulls still take shape under the hands of men who learned their craft well.

One such man is Osmond Beal. Beal comes from a long line of boat builders extending back to his great-grandfather. Beal has been actively involved in the building of wooden boats for the last 30 years and currently has a 36 foot boat in production. He recently launched a 35 foot fishing boat and feels that the wooden boat market looks good. Like some of the other boat builders on the island, Beal does not build throughout the entire year. Time is spent away from the shop engaged in other tasks such as lobster fishing.

Not far from Osmond Beal's shop, Richard Alley is building a 35 foot wooden hull to be used as a plug from which a fiberglass mold will be made. Alley and a partner plan to use the mold in the production of fiberglass boats.

When asked how many years he had been in the boat building business, Alley replied, "I've been building boats forever. I always wanted to build boats as far back as I can remember. It was probably born in me."

Although Alley's future plans include the production of fiberglass boats, it is apparent that he is proud of his skills as a builder of wooden boats. The hull under construction speaks for itself.

Two boat shops may be found in the Alley's Bay district of Beals. Alley's Bay is located on Great Wass Island, the larger of the two islands that make up the town of Beals. The islands are connected by a short causeway known as the Flying Place.

The road to Alley's Bay wraps itself around the shore winding past decaying hulls long ago abandoned on the beaches. Beside these remains other boats have been hauled out for a winter's rest, but will soon be working the waters around the islands as the fishing season begins again.

Ernest Libby Jr. has been building boats in his present location at Alley;s Bay for 22 years. As a small boy he spent many hours in the shops of those who already knew the trade, and it was inevitable that he would become one of them.

For the past 7 years Libby has been designing and building hulls for the Young brothers of Corea. Libby's hulls have been used as plugs from which fiberglass molds have been made. The Young brothers have produced Libbydesigned fiberglass boats from 30 to 45 feet in length. Libby's latest design for the Youngs is to be a 36 foot model.

Libby is widely known as the designer and builder of several boats, including the *Marguerite G.*, that have claimed the title of "World's Fastest Lobster Boat" at the annual races held in Moosabec Reach.

It is a known fact that Beals Island boat builders not only know how to build a sturdy, yet beautiful work boat, but that most of them delight in producing boats that fairly fly over the waters of Moosabec Reach at race time.

Clifford Alley's shop is located at the far end of Alley's Bay. The view from there is spectacular. It is there the road ends and the ocean looms on all sides.

Alley built his first boat at age sixteen and has been building ever since. During his 27 year career he has built roughly 75 boats from the keel up, and he has finished off 9 fiberglass hulls. Clifford Alley is yet another of the small boys who watched and learned from those master builders who have since passed on.

The three youngest boat builders on Beals Island can be found not far from the Beals-Jonesport Bridge. A turn to the left will take you to the shop of Willis Beal. A turn to the right will take you past the shop of Calvin Beal Jr. and on to the Barney's Cove shop of Douglas Dodge.

Willis Beal began his boat building career in 1963. During the past 19 years, that Beal has been building on his own, he has produced 23 boats. The forty-year old builder, who lobster fishes part of the time, will be laying the keel for a 33 foot boat this coming winter. Beal has always liked working with wood and recalls many boyhood hours spent in various boat shops around the island.

Calvin Beal Jr. set up his first boat at age sixteen with the help of his brotherin-law, Ernest Libby Jr. Later on Beal spent a number of years working in Libby's shop. By 1970 Beal had started his own business and to date has designed and built around 25 boats. His 30 foot "Little Girl" took the title of "World's Fastest Lobster Boat" in 1981.

Calvin Beal Jr. has built two wooden plugs this year to be used in Steuben and North Port in the production of fiberglass boats. He currently is laying the keel for a 36 foot wooden fishing boat.

Douglas Dodge, at age thirty-eight, is the youngest builder on the island. Dodge's interest in boats began at age six in the boat shop of his uncle, the late Harold Gower of Beals. Dodge's greatgrandfather was Will Frost, the designer and builder of the famous "Jonesport model."

Dodge spent several years establishing and teaching a course on wooden boat building at the Washington County Vocational Technical Institute in Calais and Lubec. In 1974 he reopened the Gower Boat Shop at Beals and went into business for himself.

Dodge builds his boats in the traditional way, working from a wooden model, and he is constantly seeking to improve his models and methods of building. He has worked in both fiberglass and wood and was the first builder on the island to produce fiberglass hulls from a mold he designed and built himself.

Dodge acknowledges the stiff com-

petition that builders of wooden boats face from the fiberglass industry but feels there will always be a market for the wooden boat. He wonders if perhaps more of a concern will be who will carry on the time-honored tradition of wooden boat building at Beals. Will his generation be the end of a long line of craftsmen, or will there still be small boys who will catch the "fever" in the dusty shops and go on to be the craftsmen of tomorrow?

Brenda Dodge is a native of Jonesport and a resident of Beals Island. Married to one of the island's well know boat builders, Mrs. Dodge is a freelance correspondent for the Bangor Daily News. Her work has also appeared in Washington County Magazine, Downeast and Offshore.



Frenchboro by Rebecca Lunt

Frenchboro, otherwise known as Long Island Plantation for many years, is located in outer Blue Hill Bay 7 miles southeast from Mount Desert Island and 3 miles East of Swan's Island. At present there are 55 year-round residents on Frenchboro, though summer time brings out 17 more people that own homes here. They visit off and on all summer.

The island school was a one room school up until a few years ago when fewer children enrolled. So the teachers erected a partition through the middle of the room and used the other side for a library. On the other side the children have their piano and space to exercise or play.

There are 8 children in the island school which goes from kindergarten to eighth grade. In April of this year, the school lost the Sawyer boys, Christopher and Corey. Corey was born paralized from the waist down with an open spine and the Sawyer family is moving to the mainland for extra schooling and therapy. Darcey Higgins and Tammy Crossman are both eighth graders and will be going to high school on Mount Desert in the fall; leaving only 4 in school for the next year: Donnie Badger, 4th grade, April Davis, 6th, Bobbi-Jo Lewis, 7th, and Warren "Pard" Higgins, Jr., 8th grade.

Frenchboro's only lobster dealers are Lunt & Lunt Company. Vivian (mother) and David Lunt (son) also sell gasoline, kerosene, diesel fuel, and they rent moorings. Visitors can buy lobsters from them and they will also cook them for yachtsmen who don't have the facilities to do it themselves.

The island's main resource is lobster fishing. We only have a small amount of clam flats, but each one is entitled to a peck of clams once a week. Some of us pick crabmeat and sell it.

There are two new homes that were built here in the past two years and a third one is in the making this year for Gilbert Butler (a Banker from New York) at the Salt Ponds. And we're in hopes for more new homes.

The Womens' Group which is named "Little Stitches" meets on Mondays, except during the summer. We all do different things such as knitting, crocheting, sewing and other crafts such as things done with pine cones, etc. We have two sales a year; one near Christmas time, but our biggest sale is at our annual Lobster Festival which is always the second Saturday in August. The sale is held at the schoolhouse where we have a white elephant sale to help on our building fund for the Frenchboro Historical Society Museum.

Our Frenchboro Historical Society was founded in 1978 and we are really going strong. For three years we have had our Museum set up in John and Rebecca Lunt's basement and in a little building across the road. Between memberships and crafts that we've sold, along with Rebecca's fudge, we've accumulated enough to erect a Museum this spring. It will be open rafters inside and finished completely on the outside.

and finished completely on the outside. The basement will be back with "Beckys' Boutique" this summer, where home sewing, crocheting and knitted articles along with crafts and lots of home cooking are sold.

The Fire Pond provides swimming in the summer and skating in the winter. You can also go on picnics to the back shores. There are woods roads and paths you can travel on and maps are available at the F.H.S. Museum that shows you how to get to these different places and how long it takes.

A lifelong resident of Frenchboro, Rebecca Lunt sends us this delightfully warm and personal island letter. Through all the fuss about island environments and ecology, politics and concern, we can hear the true heartbeat of island communities — their people. We like this letter a lot, and invite more of them from islanders, all up and down the coast.

Reversing the Tide

The island town of Frenchboro, 6 miles south of Mount Desert, is balanced precariously on the edge of survival. Unless island residents are able to stem the slow tide of families 'removing' to the mainland, Frenchboro may join the ranks of Criehaven, Hurricane and dozens of other islands which once supported flourishing small year-round communities where now only seasonal residences remain. In a remarkable show of unanimity, town residents are trying to complete the negotiations over a complicated community development proposal that involves island businesses, summer residents and state and federal agencies investing in the structures which make island living worth living: namely, schools, ferry landing, fire station, wharves, and housing.

The proposal, put together by Town Manager James Haskell, is attempting to raise \$968,000 to construct 20 more year round houses; to upgrade and insulate existing homes; to replace the existing ferry ramp with a new 36 ton ramp; to install indoor plumbing at the schoolhouse; to build a fire station and fire pond for fire protection and to level an area for helicopter landing pad for emergency medical evacuations. Frenchboro's proposal to the Maine State Planning Office's Community Development Block Grant program is, in the language of planners, 'highly leveraged,' another way of saying that public money is matched against several sources of private investment. The Town of Frenchboro proposes to put up \$105,000 toward the package; Lunt and Lunt Lobster Company will invest \$40,000 in new wharf facilities if the town can attract 10 new fishermen. The town's largest private landowner, Peggy Dulaney, has agreed to donate a 55 acre parcel of land worth \$110,000 near the harbor where new homes can be built. And existing year round residents have pledged to invest \$60,000 of their own money toward refurbishing 15 existing homes.

Skeptics have asked who will move into the new community housing if islanders themselves have not been able or willing to stay on Frenchboro yearround. But Haskell points out that Frenchboro is blessed with an abundance of good fishing bottom, year round bottom, that the island is slowly losing to fishermen from other harbors. Perhaps not everyone is suited to island life, but opportunities for new fishing berths like those on Frenchboro do not appear everyday. For those willing to work hard and commit to year-round island living, a new future may be waiting on Frenchboro if Haskell and the islanders are successful. Do you want to go fishing?



Mt. Desert Island? by Gunnar Hansen

"I hope you don't consider Mt. Desert Island an island," the lawyer said. "It hasn't been an island since they built the bridge."

I didn't say anything, though he had touched a nerve. A bridge of one sort or another has spanned Mt. Desert Narrows for something like 150 years, and I couldn't argue with history.

I had another reason for not arguing: maybe he was right. I know of course that the bridge doesn't change geographic facts; Mt. Desert is surrounded by water, so in that respect it's an island. But what he meant was that the connecting bridge means that Mt. Desert is no longer an island psychologically. And that's something I wonder about myself at times.

I asked a friend whether he thought Mt. Desert is an island. He said, "Sure it is. Just smell it. When you come across the bridge, other places don't smell like that. It smells like the smell of home." I like that smell, too; but to me it smells more like a tidal flat than home.

I do think of Mt. Desert as an island that's why I'm here. I was born on an island, Iceland, 500 miles from the nearest chunk of land. I feel unnatural when I'm not living on one.

Mt. Desert has almost all the characteristics of an island. It has definite boundaries. I can travel only so far before I simply run out of Mt. Desert Island. I can't get lost on it. I always come out somewhere if I walk long enough. And when I climb to the top of Cadillac Mountain, I can, with the sweep of the eye, encompass the entire island.

And that creates a real sense of definiteness about Mt. Desert, that it is "here" and nothing else is "here." It is discrete from all other places, with a moat to boot — not like the main, where one place blends into the next. This place is all island, and all things that are not island are not on Mt. Desert.

It means that the island has a certain protective quality to me, that there are real reasons I feel better on the island than off. This creates a feeling of specialness about it. It means that I cannot think of Mt. Desert in the same way I think of other places, no matter how much I may like them. Schoodic Peninsula just doesn't have it. It's nice, but it's not an island. And I think Mt. Desert islanders in general see this place is different. We see ourselves as a bit more blessed than nonislanders. And that is ultimately what defines the island in the heart.

Still, I do feel a bit ill-at-ease at times thinking of Mt. Desert as an island. Am I putting on airs when I talk about The Island? I feel it most when I'm on Vinalhaven or Little Cranberry and say something about Back On The Island. Impostor, I say to myself; they think you're an impostor. You just want to be like them, to think you live like they do, have those hardships and advantages of living on an island, feel the boundaries and sense of place, feel the loneliness and protection of an island.

And they're right. I do want those things. Whenever I leave the island, even for the afternoon, I do feel that I am going far away, that the main is different, more open, less sure. And I do feel that relief every time I come back across the bridge, that feeling of being safe again, of being home, of being *here*. I feel the island is blessed.

Of course the trouble with all of this is the bridge. I asked my neighbor Bob whether Mt. Desert is island, and he said, "Used to be. Now they've turned it into a peninsula." He doesn't sound pleased with it, either. He doesn't like "almost-islands." Before the first bridge was built so long ago, Mt. Desert was separated from Thompson's Island by a tidal marsh, and Thompson's was separated from the mainland by a healthy quarter mile of open water. Over the years, though, that has changed. The roadway to Thompson's was filled in, uniting the two islands. And each time a new bridge was built, the distance across Mt. Desert Narrows was reduced by filling in more of the connecting roadway. Now the span of open water is a matter of yards. All too many visitors don't even notice that they've crossed a bridge and have landed on an island.

And that bridge with the attendant loss of isolation means Mt. Desert has lost certain characteristics of other islands. On Mt. Desert I'll never feel the rock fever that sometimes strikes on Matinicus or Frenchboro, that feeling that, because of storm or ferry schedule, there's no way off. No way back until tomorrow or next week or who knows when. The bridge always lets me get off Mt. Desert if I must. I get in the car and head out. Or at worst I walk. I'm never stuck. So I'm susceptible only to standard Maine cabin fever, a pale cousin to rock fever.

Perhaps this reduced isolation also prevents us from being so dependent on each other as people must often be on other islands. I sense that otherislanders feel themselves much more of a family then we do here. Those islanders have the same problems as all families, of course — the feuds, the people you're sick of, the intrigues, the fussing, the-alltoo-intimate knowledge of your weaknesses and what you mistakenly think of as your private business. Standard family fare. But those islanders also close ranks quickly when there's trouble, more quickly than here. They know their loyalties ultimately must lie with each other.

Here that feeling of interdependence just isn't as strong, weakened by the island's dominating connections with the outside world. Too many people go to work in Ellsworth every day, or do their shopping in Bangor, or jump in the car at the last minute and race the twenty miles to the movies or for a drink. Still, there are those who fight it. Neighbor Bob used to claim he had gone more than a year without even leaving the island. Not even as far as Trenton. Not even Thompson's Island. He was driven by some pure vision at the time, I think. He wanted to be like Aunt Phoebe Stanley out on Baker's Island who was afraid of water. She came onto the island as a bride and never left it till she died more than 50 years later.

But even Bob eventually admitted it was all a fantasy, that he did weaken now and then, and go off. There even came a time when he and his wife left the island once a week for dinner and a movie. Then they took a couple of trips up to Boston. It was inevitable. The bridge called, the road was open, and the freedom and ease of leaving was just too overwhelming.

Since then, though, I sense that Bob is one of those who occasionally mutter darkly about the value of blowing up the bridge. That may be the only solution to the question. With the bridge gone, things will be easier. We'll have no way off. We can go back to the old days of rock-washed shores and isolation. We'll be a pure island, and we'll know it.

A native of Iceland, Gunnar Hansen has islandness in his blood. As a professional freelance writer, whose work appears in many national magazines, and whose teaching is part of the Writer's Pool at College of the Atlantic at Bar Harbor, he has an elegant way of expressing the sense and sensibility of island life and mystique.



From Isle au Haut

Stanley G. French of Round Pond, Maine who describes himself as being from a third generation summer family on Isle au Haut, is compiling a carefully researched history of the island based on

the work of the island's earliest photographer, John C. Turner, Turner was born and died on Isle au Haut (1853-1921) and was a jack-of-all-trades on the island who ran, among other things a boarding house and a barber shop. But his real love was photography. Beginning first with wet emulsions and later changing to dry plate negatives, Turner took a remarkable set of shots of daily island activities, group portraits, landscapes and boats in the harbor. Among the 120 Turner plates and prints which Stanley French has found (mostly at the Revere Memorial Library on the island) are priceless shots of the mackerel fleet in the Thorofare, a seagoing cobbler on his scow, the total immersion baptism of Alpharata Rich and early pictures of Point Lookout. French has patiently sought out all of Isle au Haut's remaining elder citizens and has painstakingly identified 80% of those who appear in Turner's work. Mr. French has been working on the project for several years and we will continue to report on his progress.



Matinicus by Donna Rogers

For thirty years I have shared a love affair with this particular plot of God's land. Every day of that time I have walked the island's pathways, enjoying this hard independent life with no thought to trading what it offers for the luxuries of the mainland.

Not everyone sees the qualities that make it special, but for those who do it's a lifelong affair of heart and will; and we are tied to its shores forever. There's nothing really special to see when you round the breakwater and enter the harbor. Just a tract of neat houses and trap shops clinging to the shore and a fleet of well kept boats bobbing in a restless line, always facing into the wind.

There is one store, one church, one school and one main road running North and South with branches east and west. All dirt and all rough.

There are no daily ferry runs as with most of the coastal islands. Mail is brought by small plane, owned by Stonington Flying Service, and if one wants to visit or vacation here they learn to fly or make arrangements with one of the local fishermen, for private transportation by boat. Albert Bunker would be their best bet, although anyone here will take you aboard if they are coming or going. People here have long since learned the value of accommodating their neighbor or the stranger standing on the wharf, whether off-loading supplies from your boat or sharing with fellow passengers, a trip to the Mainland. The one you help today is the one you'll depend on tomorrow. It's a time honored and very necessary tradition of island living.

We have one small school with grades running first through eighth. After that they must go to the mainland, either to boarding school or to live with private families and attend public high school. Having sent three of my own away I can honestly say that it's the hardest part of island living. Sending your thirteen or fourteen-year old away is hard, and some refuse to do it, choosing to live the gypsy life of traveling back and forth with the seasons. Sometimes with part of the family here and part of it there until the children have graduated. There are no easy choices, just choices.

Matinicus has one store with the most basic of supplies, but anyone living here makes many boat trips and many plane flights in the course of the year. You learn to steel yourself against the knowledge that its blowing 25 knots northwest and you're probably going to be seasick. You learn to take off in 40 knot cross winds with nothing but prayer and absolute faith in the pilot. In this case there are two, Herb and Charlie Jones, father and son respectively. These two men have taken care of our needs in all kinds of weather for all types of emergencies, with never a serious accident or misplaced judgement. You learn to make do when you're stuck on the mainland for 3 days waiting for the weather to clear so you can go home, and to take it with a "grain of salt" when you don't get to keep the third doctor's appointment you've made in 6 months. If there's one motto an islander lives by it's "Learn how to wait." You wait for the weather, you wait for tides, and sometimes you wait because you're tired of waiting.

Matinicus is basically a lobstering community with some of our fishermen switching to seining in the summer. This industry is dependent on the wiles of the elusive sardine or herring as they are called here. Periodically they hit our coves like so many shiny silver dollars in the moonlight. A beautiful sight to see and one I was privileged to view many times over a 20 year period. Spring also brings a spell of trawling for halibut. This, however, must be listed under playtime or hobby, since no fisherman to my knowledge has ever shown a profit at it and men with halibut trawls are apt to resemble small boys flying their first kite. Still there is nothing fresher or better tasting so the myth continues with my blessing.

Geographically, Matinicus is two miles long, more or less, and one and a half miles at its widest point. It has two beautiful white sand beaches, one at the South End called "Southern Sands"; and one at Northeast Point called "Marky's." after its former owner who once had a large farm at its head. We have two small ponds. One called "Black Duck" Pond, after its residents, and one called the "Ice Pond" because it was here that the early timers cut their ice for the summer. Our forests are mostly spruce with a few birch scattered here and there and a lot of wild apple trees that grow in the fields. It's said by some of our older people that at one time there was little forest and most of Matinicus was farmland used for gardens and cattle.

The outer edges are made up of many small coves with names like Philbrick's Cove, Cosy Cove, Old Cove, Congdon's Cove and Timmy's Point. The strip of shore front is called Harbor Point and has been in undivided ownership for over 100 years. One interesting note is that somehow there are now more shares on the harbor that have been sold than there were shares to sell. The fields and woods are filled with many varieties of plant life. A woman of some knowledge once told me that Matinicus is a botonist's heaven and that she had found 40 types of mushrooms, many edible. Matinicus has woodpaths crisscrossing most of the island allowing any happy wanderer to discover her secrets with little or no restrictions as to where they can go, as long as she is treated with care and respect.

The name Matinicus is a gift from the Indians meaning grassy islands. The first permanent resident was one Ebenezer Hall, later killed by the Indians. His son started the colony around 1750. Early settlers were Halls, Youngs, Cries, and Tolmans. By 1800 they were joined by Burgess, Philbrook and Ames. Some decendents, namely Youngs, Ames and Philbrooks still survive and live here. Electricity and telephones have been with us for only 25 years and even with modernization you're still apt to find yourself some rainy windy night with a kerosene lamp for company.

I guess what Matinicus offers most is her stubborn refusal to keep up completely with the rest of the world. There are no factories, no traffic, no noise, except for the sound of waves breaking on shore or the bell buoy on a blowy day. You can hear birds in the woods, gulls cursing the dawn, and now and then a boat engine at the break of day. It's a place where time stands still for as long as you want it to, and then keeps rhythm with the course of your day.

Behind me on the wall is a clock. It tells the time but it doesn't dictate what any man living here must do with it. To spend the day on the water answering to no one but himself and the weather. To walk wherever his feet want to go without fear of his neighbor. To know if he's lost on the water or needs help on land that there isn't anyone here that wouldn't risk his own to help. To throw away the clock if he chooses. This is Matinicus, this is my island.

Matinicus resident Donna Rogers is her island's correspondent to the Rockland Courier Gazette, and editor to the Ladies Aid Newsletter, an annual survey of issues for voters.



Vinalhaven by Pat Crossman

We've all read about the dedicated individuals who volunteer their time and energies to save endangered species from extinction, and we salute the success of their efforts. But we tend to ignore the quiet struggle of our coastal historical societies to save the relics of our sea-borne past from the same threat. That struggle has continued in Vinalhaven for 30 years.

To the determined few in Vinalhaven and similar towns all over Maine who collect, catalog and preserve the treasures of our yesterdays, we owe a singular debt. Particularly since Americans as a whole and rural Americans in particular, went on a throwaway spree in the post World War II period. Free after four lean years to buy meat and gasoline without ration stamps, heady with victory and new prosperity, we stampeded into furniture stores and auto dealerships, bent on embracing the new. New names promised care-free maintenance: nylon and naugahyde, vinyl and stainless steel. We abandoned wallpaper for painted walls, ate from mel-mac plates on plastic mats, and bought imitation leather jackets and orlon sweaters.

But it wasn't enough to surround ourselves with the new. We had to excise the old. We dug enthusiastically through attics, sheds, barns and cellars in order to "throw away all that junk!" What use would we ever have for it? Some of it was so old! Our grandparents, even *their* grandparents, had stored the accummulation of their lifetimes there.

Onto the dump went Aunt May's wicker baby carriage, Uncle Sid's monstrous oak desk, the box of jet buttons that was always spilling in Gramma Alice's sewing basket; and oh, yes, the basket went too, along with the homemade clothespins, the maple firkin, and those clay pots with covers that Dad made home-brew in during Prohibition. Out the door went worn and faded quilts, partial sets of English china, hall trees, boot jacks, and the massive bedstead where generations were born and died. The heritage of countless families ended up collecting dust in mainland second-hand shops. Unscrupulous antique dealers paid pitifully low prices for pieces they would later sell for an amount more in keeping with their value. In the offshore island towns the enterprising dealer found a bonanza. Who of us knew how much a child's sleigh was worth? Or those old tools in the barn? We just wanted to start over fresh, surrounded by new things, driving a new vehicle. And who could blame us? But in our eagerness, we allowed some of the best physical evidence of our beginnings as a society, a community, and a country, to disappear forever.

It was about 10 years after the initial post war euphoria that we began to look at our chrome and plastic dinettes, now rust-pitted and split, and wonder if we might not do better with a wooden table, one with lots of leaves for a growing family; one in fact, like Aunt Lucy's that used to be stored up in the barn chamber. We remembered with regret that antique feller from Waldoboro who came out on the ferry one day and offered to take it off our hands for \$10 along with six leather seated chairs. It was all he could do to get it in the back of his pick-up truck.

A feeling of disquiet became more and more pervasive. What had we done in our grand rush toward the future? We tried to dismiss our disquiet by reminding ourselves that it wasn't right to put too much importance on *things*, material things. After all, you couldn't take it with you. But that feeling wouldn't go away, and slowly it began to dawn on us that we had, in the deepest sense, discarded a part of ourselves. Because all those relics we had relinquished connected us to the people and the times that shaped us; to their hopes and dreams, struggles and heartaches in ways that outlived memory.

We began to temper our advance into the future with long looks backward. We found, in spite of ourselves, that we had a few treasures left, a few of those unique connections to our heritage: a ring in an antique setting, a darning egg, a family Bible, and those letters grandpa wrote when he was a cook on a vessel running down the Caribbean loaded with ice and beating back loaded with rum.

On Vinalhaven, as in other towns, a few individuals stood outside the lemming-like rush toward tomorrow: the town clerk compiling genealogies, the amateur historian sifting rumor from fact, the retired schoolteacher, last of four generations living in a house where nothing had changed since her parents put in electricity in 1910.

Suddenly, these people seemed not eccentric but wise. We were less enchanted with the present and more curious about our past, individual and collective. Collectors and archivists commanded new respect. Out of that renewed hunger for a sense of continuity grew Vinalhaven's Historical Society. With persistance and determination its members have provided us with a museum where the treasures that remain can be displayed and shared.

On March 14, 1966, the people of Vinalhaven voted to lease the spacious old Town Hall structure which has been used over the years as a dance hall, theater, roller skating rink, and school room to the Historical Society; and it has, since that date, been home to the Society's uniquely arranged museum displays. With no single curator or director, the museum "just growed".

The task of accepting, cataloguing, and arranging acquisitions has been an arduous one, undertaken, except for a brief period of help from a state professional, entirely by society's volunteers and summer C.E.T.A. workers.

The active membership has dwindled in recent years. Many of the original members are now deceased or in frail health. As a result, the group today is most concerned with maintaining its present facility, improving displays, and presenting speakers and films of interest to the public.

The Society needs an infusion of new blood, community interest, and money. One of our major aims is recruiting manpower to clean out and fix up the basement of the museum building. We need the space to display an antique hook and ladder, a North Haven dinghy, an ornate horse-drawn hearse, and a deep sea fishing dory. Other bulky items taking up space on the main floor would be moved there, as well.

What would a visitor find there today? A 125 year old signature quilt, an exquisite shawl brought from Asia by a sea captain for his daughter waiting at home, a hand-held steam-operated popcorn machine, a foot pedal operated dentist drill, a net-stand, and tables covered with albums and pamphlets that invite browsing.

A paid full-time host is in attendance at the museum during July and August. The museum is open daily Monday -Saturday from 11:00 A.M. till 3:00 P.M. On Sunday, a member volunteer is on hand to welcome visitors.

With the on-going task of cataloguing and filing donated articles about halfcompleted, the dozen or so active workers need the renewed support of their community and friends in the form of active volunteer participation, and society membership.

Many of the Historical Society's goals have been realized. The granite industry display is evocative of a time when the population burgeoned due to the influx of stonecutters from Finland, Italy, Scotland, and Scandinavia. The quarries flourished until 1939, leaving their geometrical marks behind as permanent reminders of a time forever past. But, though the rugged quarry men are gone, their metal tools live on, augmented by photographs, documents and scale models.

Raymond Sennett, the moving force behind formation of the Historical Society in 1963, was writing a history of the island community when he died. The manuscript was unfinished. His untimely death while still in his forties brought a personal dream to an abrupt end.

Ray would be proud of this dedicated group, who, 20 years later, still carry on in his spirit, faithful stewards of the island's past; the keepers of the flame.

There are several other island historical societies that we know of (Frenchboro, Deer Isle, Islesboro, and North Haven, to name a few), that we would also be eager to hear from.

Mrs. Pat Crossman who has worked to preserve the Big Fox Island legacy, is also the author of several stories that have appeared in Redbook, Good Housekeeping and Ladies Home Journal.



Robert Indianna Building, Vinalhaven:

New Englanders generally, and islanders specifically, have become distressed in recent years over the loss of their old buildings, especially those with attractive features and important traditional community functions and sentiment. Not always slowly, but just as surely, market mechanisms have made properties more valuable for other purposes. Owners die without heirs, organizations lose their vitality and memberships, or older frame constructions becomes too expensive to maintain, or in any case cannot meet contemporary public safety standards. To be sure the National Registry of Historic Places has been an enormous help in preserving some of these buildings, but it still takes hard work and dedication on the part of individuals to secure, and see to the perpetuation of remaining structures.

The International Order of Odd Fellows (IOOF) hall in the village of Vinalhaven is such a building, and has such an owner. Renowned contemporary artist Robert Indianna purchased the building several years ago and soon closed his New York studio to become a permanent resident of the island's Odd Fellows building. He then successfully placed the structure on the National Registry rolls, and began the long, costly, detailed and careful process of complete rehabilitation. The interior, roof and cupola; and the entire front facade of the building are a witness to the purpose and wisdom of the national program, and the effectiveness of serious intent. While three exterior walls remain to be refurbished, already the rejuvenation is having its effects on other buildings in the village. It is not only an accomplishment, it has given incentive to others to preserve the island's architectural heritage.

All the decorative exterior shingles were replaced, as were the moldings and most severely decayed window frames and sashes; perfect duplications of the originals. All windows were reglazed, and protected by new storm windows, again duplicates of the originals except for plexiglass panes. The ironwork was completely restored, and the color scheme is a carefully researched recreation of the building's earliest dress.

In recent years there has been considerable ambivalence over the loss of the town's old GAR Memorial Hall, now site of a non-descript Post Office, and other village buildings of fond memory. Vinalhaven islanders hopes that Mr. Indianna's courageous effort has brought an end to the systematic architectural demolition of recent times.



Islandlife- North Haven

An island culture is filled with paradoxes; many of its stengths are also weaknesses. The island itself can be clearly defined by its boundaries with the sea, but living on North Haven isn't as easy to put down. Island life is a fabric where the complex weave of isolation is both a blessing and a curse; the physical beauty an attraction and a liability; the small community both an advantage and disadvantage.

By being isolated, a North Havener rarely needs to lock his doors or ever listen to the whine of eighteen-wheelers throttling through a neighborhood. We have a twelve mile cushion of water surrounding our island home and; moatlike, it keeps the world at bay. At the same time it demands a certain price. No casual, spur-of-the-moment trips to Rockland for us (who would want to go anyway, you ask?) and when the school basketball teams play "away" games they are really away. And that spare part you need for your engine won't be here until next Wednesday.

Set in the middle of Penobscot Bay, North Haven possesses undeniable beauty, both in itself and in the views from its shores. Our assets are rolling fields, woods of spruce mixed with birch and maple, and the surrounding smaller islands and protected coves. We can even boast of having a pond with a beaver. Drawn to this archipelago as if by a magnet are the summer folk, the island's life blood; and with them a sometimes stressful relationship between those who spend their winters here and those who don't. The interdependence is both simple and complex: without them, we couldn't exist; without us, they couldn't exist. So a balance is struck, based on friendship as well as need. It may be a bit crowded in the summer, but it pays the bills and gives the winters a special feeling of reprieve.

Our island town is small with 340 people living here and 56 students in the K-12 school. Small can be beautiful, but it's also hard work. Nearly the whole high school must turn out for basketball if there is to be a team. A businessman may have a "captive audience" of customers, but can an electrician survive in a town of three hundred?

It is from ambiguities such as these an island culture gains its strengths, and at the same time is fragile. This mix of isolation, beauty and smallness leads to both an individual and communal sense of self-reliance. How individuals deal with the hardships, and pleasures, determines the character of the community. The process of dealing with the good times and the bad is never ending; predictable, if at all, only with the changing seasons.

In winter the island can be as bleak as it is beautiful and the hard times must be tempered by a sense of adventure and good friends. It is in winter that an island's true spirit comes forth, when people are pulled closer together or sometimes apart. Small things become more important; things like the school basketball games, Grange suppers, what might have come in the mail, who came on the ferry boat and what the weather will be tomorrow. Issues like the school, or the condition of the roads or how much your neighbor's taxes are can become divisive and the trick to surviving is to go to the basketball games and Grange suppers, pick up your mail, know who came on the ferry and have an opinion about tomorrow's weather and taxes.

To outsiders it can seem deceptively simple, and at times it is easy; but the apparent simplicity is marked by all of the complexities of life ashore, only played by a slowly changing cast of characters on a smaller stage, making for the intricate choreography of islandlife.

Jon Emerson is a year round North Haven fisherman active in community affairs. Like all island townships, North Haven is facing the quickening march of history, and its bag of changes. The island's old (one of the first) resort-estate communities has inevitably tempered its service requirements, and so the resident citizens are seeking ways to revitalize their more ancient patrimony in selfsufficiency. They have formed the North Haven Futures Group, to monitor the recent tendency toward estate sub-division and to encourage and support a viable, vital year-'round economic base. A man of many interests and activities, Emerson has recently become an editor of the island's new newsletter, "North Haven News," a well-written and attractive publication which speaks for the kind of future they seek.



Islesboro by Steven Miller

On a raw, grey Sunday morning early in April, a pick-up stops in front of our house. Two men inside the truck look expectantly my way. I'm dressed in rubber boots and winter wear and walking out the door within minutes.

Conversation is light as we bump down the rutted dirt road, then turn into a more narrow dirt drive. Shortly the 3 of us are heading into the woods with a heavy, tall, wooden ladder. The ground underfoot is clear at first through old field alders and then a stand of large cedar and birch. The woods quickly become thicker with young balsam fir and red spruce. Then an opening ahead lights up as we approach an inlet to a salt water marsh. Across the wet, grassy swale, we rise into mixed wood again. Soon Roger says, "There," and points up toward the top of a dead birch.

We've come through snow patches and mud to help Roger Exline set-up a blind high in a sturdy timber spruce. This will enable him to watch an active osprey nest. This nest, one of at least 27 on Islesboro, will hatch out 1-2 fledglings this year. It's part of an osprey observation and banding project Exline has been developing here with help from two well seasoned island ornithologists, Becky Cregar and Wilde Mellencamp who also spend time in the Philadelphia area. "Historically, Maine has been lacking in observations of nesting osprey, Roger points out. "I think it's important to monitor the osprey and gather data partly because they were decimated not many years ago and also to get a truer picture of the eco system along the coast. They only eat fresh food so if there was a contaminant, it would show up. Being at the top of the food chain, predator you can easily tell what they are getting out of the environment." This may be especially important since many osprey winter nest in South America where use of chemicals like DDT is widespread.

As an ornithology student with a particular interest in coastal birds, Roger began to get involved with osprey last year. The nesting pairs on Islesboro represent a significant number of the osprey population in Penobscot Bay which is why Exline got involved.

With help from Cregar and Mellencamp, who have some 30 years of experience banding birds, Exline got permissions from the Maine State Department of Inland Fisheries and Wildlife to color band fledglings here in 1983. A black band on one leg indicates the year of the bird's birth. Another band for Fish and Wildlife identifies the nesting site as having been here in Maine. Seven birds were coded last year.

"I band at five weeks and even then the young are strong," said Roger. "The adults fly around and rattle their talons, at least I think that's what they're doing, making a clicking noise."

The Islesboro group hopes to add another band to the young's leg this year (that is, to those newly banded in 1984) so that a bird's individual identity can also be recorded. In this way, life history can be recorded from year to year. Migration and mating information coming from such data could help others assist the osprey population come-back.

Much care is taken to not bother nesting birds. It is critical that the female remain on the incubating eggs the 34 to 38 days needed for successful hatching. It is significant that on this island, only five nests are located south of the Narrows where human population is greatest. All forms of observation should be conducted with supreme respect, Exline cautions.

Toward the goal of better understanding these giants of the coastal airways, Exline is interested in communicating with other islanders who are watching nests. He can be reached by writing or calling at Mill Creek Road, Islesboro, 04848.

Steve Miller has lived on Islesboro for the last decade and like many islanders says he does "a variety of things."

A companion volume to the original History of Islesboro written by John Pendleton Farrow in 1893 will be published this summer by the Islesboro Historical Society. The effort to get the 360 page volume titled The History of Islesboro: 1893-1983 published was spearheaded by Margaret Hatch, who chaired the committee that compiled the new work. Written by town residents, the history covers topics ranging from the social institutions and natural forces which have shaped the life of the island during the last 90 years with a section devoted to the genealogies of year round and summer families of Islesboro.

Copies of the new history are available through Jean Hayden, Secretary of the Islesboro Historical Society, Islesboro, Maine, 04848. Illustrated with old photos and maps, the volume will cost \$35.00 plus \$1.25 tax for Maine residents, plus \$1.25 for mailing.



Monhegan by Katy Boegel

It seems like it was a long winter out here on the rock. High winds kept the fishing fleet locked in the harbor for days at a time. It's amazing there wasn't more damage done, but all 12 boats came through it well. The only visible sign of the rough winter are the number of trees down. The trails at one point were almost impassable, but John Hultberg and Danny Bates have done a fine job of cleaning things up.

I guess people who live inshore think it must be boring living on an island all winter. Actually I don't find it any more boring than any place else; in fact it's probably the most interesting place I've ever lived. Just getting to the store each day is sometimes a feat in itself. But I must admit that when the wind has been blowing for 10 days straight, yes, it can be boring. However, we try to keep ourselves occupied.

The knitting club was started again this year. Attendance has been at an all time high. We meet every Friday in various houses on the island. We were meeting every Tuesday but this overlapped with the Jane Fonda workout group, so it was changed. Now everyone can partake of whatever treat our hostess has baked without the worry of cramping up half way through Jane.

The workout club meets every Tuesday, Thursday and Saturday at Amy Melenbacher's house. Amy and Bill Baker have recently purchased the Cundy house. They have been busy all winter converting part of the house into three efficiency apartments.

Amy and Bill have also been good enough to keep the town geese all winter in their chicken coop. The geese became quite a problem this year when they went on a feeding frenzy, terrorizing everybody. For days they followed people around the town biting and making a general nuisance of themselves. We thought they would have to be disposed of until Amy and Bill took them in. The chickens don't seem to mind.

Now that spring is in the air the Volleyball Club is anxious to start up again. This club, an offshoot of Mr. Vic's Health Spa, enjoys a large and enthusiastic following. We will begin their season as soon as Sherm and Barbara Stanley's lawn dries up.

Besides knitting and keeping fit, a cribbage tournament has been in progress all winter. We are now down to the semi-finals. The winner will go to Port Clyde to challenge their champion.

Monhegan is very well known for its migratory birds. Since I'm not really up on the bird population, I've asked Bill Boynton, bird expert and First Assessor, for a report. Bill tells me he spotted his first flicker the other day. This bird usually arrives in March. Other birds which have arrived are killdeer, purple finches, fox sparrows, redwing, blackbirds (male), and gannets. I spotted a couple of robins.

The new phone books came yesterday. It's hard to believe that we have only had our new telephone system for a year. Before that we had to make do with two radio phones which barely worked. It was almost impossible to order supplies or get medical help in an emergency. Private conversation was not possible because the radio waves could be picked up by short wave radios and television sets. That big telephone tower on Lighthouse Hill may look ugly to some, but we love it.

It's time to get ready to go to the Fisherman's Festival in Boothbay Harbor. Most of the island attends the weekend celebration. We participate in various events such as trap hauling contests, tug of war, crab picking, and lobster eating contests. We also do our best to consume as much food and drink as possible in a three day period. It's been a long winter and for many people on the island it is our celebration of spring.

Katy Boegel is Second Assessor on Monhegan and owns and operates North End Pizza.

Under the Influence

On entering Monhegan's harbor from either the inside or outside, you cannot help but notice a large old federal-style residence perched squarely on a knoll over the waterfront. Built in 1826 by Henry Trefethern, whose father was the last owner of the entire island of Monhegan, the timber-framed, clapboard-sided building was added to the National Register of Historic Places in 1984 according to Earle Shettleworth, Jr., Director of the Maine Historic Preservation Commission.

Though residents of Monhegan say the building was used as a tavern at some point in its illustrious history, the building was apparently given its name 'The Influence' because the Trefethern family cut such a large wake in island affairs.

Monhegan's First Subdivision

Harry Odom, a life-long resident and retired store owner has received approval from the Land Use Regulation Commission to divide a 9 acre parcel of land off the road to Lobster Cove beyond the Trailing Yew into 8 house lots. Odom's land is one of the last large developable pieces of land in Monhegan's development district as laid out in the island's zoning plan approved by town voters in 1977. Since the lots are not on the shore, shoreland zoning set back requirements are not applicable, although the lots meet the 30,000 square foot minimum required by the town for subdivisions. The water company which is owned by the town will supply water to the subdivision from the fresh water marsh around which most of the island's residences have been built. Though in a rare dry summer water conservation measures have been taken on the island, town officials do not foresee any significant impact of the subdivision on town water supplies.



Little Diamond by Harold Hackett

A fig for all your clumsey craft, Your pleasure boats and packets; Our steamboat lands you safe and soon, At Mansfield's, Trott's or Brackett's.

And down below they keep the stuff, And everything is handy; My jolly boys, I'll tell you what, That steamboat is a dandy.

The rhyme apparently had its origin with the first Casco Bay island paddlewheeler, KENNEBEC. For some reason islanders nicknamed her, HORN-ED HOG. Anyway the most frequent of her troubles was running aground. Special advertising gimmicks such as the rhyme were needed to maintain faith, although one might wonder what "the stuff" was they kept below. All of that was more than 150 years ago. Today's Casco Bay Lines still has an array of troubles and detractors.

Not long ago without much advance notice the company began to charge fare for pets. It is true there was a certain amount of instigation by a few islanders who called the Casco Bay Line's office to suggest higher rates for pets than people. It seems it's always the petless that step in assorted eliminations or select a seat nearest the inevitable dog tangle.

Island dog lovers became quite vocal, however, and one pooch was taken to see the Governor protesting discrimination or something. To add to the commotion, some wag rushed about reporting that Casco Bay Lines had charged \$15 to transport a bowl of goldfish.

Every effort was made to deceive the purser into thinking the traveler petless. One heavyish woman was boarding with a suspiciously large picnic basket when midway the bottom fell out dumping three mangiferous cats onto the gangplank. That received no reductions for group travel.

The elite of the secreted pets was a little pink pig with a green rhinestone collar. Invariably hidden in a briefcase he never squealed until the boat was well underway. Finally some agreement was reached. Now four legged pets pay, and goldfish travel free.

Every Little Diamond islander has, for the past 50 years or so, been faced with the task of joining with his neighbor once a summer in preparing supper in the Little Diamond's Casino for the rest of the islanders. So cheap and abundant is the fare every Saturday night that these meals are open to off islanders by invitation only.

A parade of patriarchal figures have sat at the heads of the three long tables over the years. Each in turn has commanded the attention of the community by banging on his water glass with a spoon.

Supper is always proceeded by some sort of invocation to the Almighty, the island insurance against ptomaine, and ended by eloquent introductions of household guests. Almost everyone goes to the suppers, including dogs.

Suppers are often followed by a number of events from auctions, dances and concerts to theatrical presentations. The latter were especially common from 1910 to 1940 when the community was dominated by several theater families and their patrons.

Variations on Little Diamond's Saturday supper are allowed on the Fourth of July and Labor Day. Then, the gentlemen of the Association prepare the communal repast. The menu has not often varied.

The Fourth conjures visions of curdled egg gravy and wash boilers full of poached salmon in cheese cloth bags. There are either too many herbs in the broth or not enough. The over sufficiently boiled potatoes are accompanied by insufficiently cooked peas. The inevitable culinary failures leave the committee in ill repute for the entire summer. But the salmon dinner with the attendant flag raising, orations, horrible parade and games has not been set aside more than 10 times since 1900.

This tradition is apparently the direct descendant of the holiday celebrations of the family of Abiel and Elizabeth Smith and their cottage tenants, who occupied the entire west end of this Portland Harbor island from 1882 to 1908.

Although salmon dinner was typical of the Fourth celebrations during the gay nineties, probably no summer colony on the coast of Maine has preserved the tradition so late into this century as Little Diamond Island.

The Labor Day Clam Bake, although a latter day tradition, is always good, possibly because one expects smoky food with burned edges and raw interiors. By apprenticeship one learns to cook seafood in a pit of rocks on the Front Beach. Layered in brown rockweeds from top to bottom are eggs, clams, lobsters, corn, and finally sweet potatoes and sometimes whole Bermuda onions.

The Master opens the Bake when a sample egg has turned hard but not yet green, and when some of the seaweed has changed from brown to the color of grass.

More often than not it seems the Bake is prepared in the rainy tail of a hurricane.

Harold Hackett, a gifted natural historian and Cape Elizabeth High School teacher, has been a life-long resident of Little Diamond Island.



Peaks Island Albert Presgraves

The southern Casco Bay islands, especially those with easy access from downtown Portland, are experiencing rapid changes as a result of the minidevelopment boom occuring in the Greater Portland area. The increasing desirability of Portland as a place to live and work has brought many new residents to the city's island neighborhood blending traditional and contemporary values in Portland's island communities.

On Peaks Island, Casco Bay's most

populated island with 1200 year round residents, a number of islanders are working with the S.T.A.R. (Solar Technology and Research) community agriculture program. The idea behind the program is to share information and knowledge about island gardening; to utilize the S.T.A.R. Foundations passive solar greenhouses which extend the typical 5 month island growing season to 12 months; to purchase seeds, seedlings, fertilizers, and tools cooperatively; to grow seedlings for personal use and sale; and establish a community garden that provides growing space to island residents who have no space of their own.

In March of 1983 about 20 island residents helped organize a program called STAR Gardeners to plant the first season's crop of seeds and seedlings and develop plans for the community garden. The Cumberland County Agricultural Extension Agent provided technical assistance in testing the island soils and selecting those areas most compatible for the proposed crops.

The passive solar greenhouses used by the gardeners were constructed by island kids as part of the STAR Foundation's summer youth education program in 1982. The two greenhouses each have approximately 200 square feet of growing area. They are highly insulated and employ water as the thermal storage medium. An auxilary heating system prevents frost damage during extended cold periods.

We established a market garden program not only to provide a modest income to offset the costs of greenhouse operations, but also to develop a small business which can be operated by STAR Foundation's youth education and employment program. Young adults from the island and mainland are supervised by the Foundation's educational staff and community volunteers. Participants ranging in age from 14 to 20 get a hands-on experience which not only teaches gardening and greenhouse management, but also provides an opportunity to learn about the food distribution system and how a small business functions. This approach enables students to learn the importance of careful money management, com-munity relations, and to see how food moves through the community from seed to dump.

The 1983 harvest included squash, peppers, tomatoes, beets, carrots, beans, cabbage, as well as a variety of cold weather plants which were harvested well into November. A portion of the harvest was contributed to the Portland soup kitchen and the Peaks Island Senior Citizen Center. A new crop of flowers and greens was planted in the greenhouses in the mid fall of last year and produced vegetables throughout the winter. Only one of the greenhouses was used this past winter, while the second was put back in production at the end of March. Recently we hired a gardener on a half-time basis to coordinate the expanded 1984 agricultural production.

In keeping with the rich history of coastal island self-reliance, it is the goal of STAR's community agricultural program to reduce, in a small way, our dependence on food imported from other regions of the country. Clearly, locally grown produce is fresher, more convenient and, has better flavor than food that comes from away. And in addition we think the community gardening activities provide a uniquely valuable experience for young adults on this Casco Bay island.

Albert Presgraves is a consulting engineer, part time resident of Peaks and a member of STAR Foundation.



Cushings Island Edith Meacham

Under the sponsorship of the Island Institute, I am currently researching the history of Cushings Island in Casco Bay. The development of this island, which is located at the mouth of Portland Harbor, is a prime example of the changes in land use which have occured on many Casco Bay islands.

The island was first described by the European explorer Christopher Levett in 1623. He was much impressed by Casco Bay in general but found the anchorage between the islands now known as Peaks, Little Diamond, House, and Cushings to be the best. It was on one of these islands that he built a stone house in 1624.

At the onset of the French and Indian Wars, a fort was built on Cushings and on several occasions inhabitants from neighboring islands took refuge there to escape Indian attacks.

In the mid-1700's, when the province of Maine began to recover from the long years of war, the island was purchased by Jedidiah Preble and farmed by tenants. The farm produced hay which was sold to mainlanders. In 1811, Simeon Skillings leased the farm. With the help of his wife and their 12 children, Mr.Skillings farmed the island and ran a tavern and a shoe shop. By 1840, he had purchased almost all of the island from the Preble heirs.

Lemuel Cushing, an energetic entrepreneur from Canada, bought the island in the late 1850's and built the Ottawa House. This seaside resort attracted many visitors as well as those from the Portland area. The hotel burned once, was rebuilt and burned once again in 1917. During this span Cushings was a pastoral haven for summer visitors. Newspaper records say that 2,000 guests a night were not uncommon during the summer months.

Fort Levett was added to the island before World War I but this change did little to disrupt the peaceful atmosphere of Cushings. Gradually during this century, the army and the Cushing family left the island and today a small summer community of around 30 families remains to enjoy the slower life that only an island can offer.

Research for this project is being carried out at the Maine Historical Society, the Portland Public Library and the County Court House. This type of research yields dates and names but it is more difficult to form an accurate picture of the day-to-day events in early islanders' lives. Interviews with longtime residents help but can only go so far.

Any information or suggestions that Island Journal readers have concerning this island's history or that of others would greatly be appreciated. Please contct Edith Meacham, Island Institute, Box 429, Rockland, ME 04841.

Edith Meacham, a recent graduate of Yale University, and summer resident of Cushings Island is the Island Institute's first history intern.



"A SING" ON MONHEGAN ISLAND.

ISLANDERS

BEFORE US

By Art Spiess

The Island Institute is pleased to announce the creation of the Coastal Island Archaeology Fund, a restricted account dedicated to increasing our knowledge of Maine's coastal island prehistory.

The Maine coast and islands contain the best preserved archaeological record in the Northeast, both in our Indian shellheaps and our early European forts and cellar holes. But the Maine coast is eroding, and many of these sites won't last another 50 years.

At present Maine archaeology is supported by a patchwork variety of sources, but money is just not available for some key pieces of the time-consuming, labor-intensive archaeological process. For example, it is difficult to find money for vitally necessary laboratory work. At present there is no source of funds for construction of erosion-control walls to save the highest priority sites for future work. Finally, exciting and major excavation projects simply cannot be mounted without additional sources of funds.

The Coastal Archaeology Fund at the Island Institute will be used to widen the bottlenecks in the system to achieve the advances in knowledge that awaits us at the edge of a rising sea.

The Fund will be administered by an Advisory Board consisting of the Director of the Island Institute; Dr. David Sanger, Professor of Anthropology, University of Maine at Orono; Dr. Alaric Faulkner, Associate Professor of Anthropology, University of Maine at Orono, Dr. Arthur Spiess, Archaelogist, Maine Historic Preservation Commission; and Dr. Bruce Bourque, Archaeologist, Maine State Museum.

orget what you H had learned in high school (if anything) about Maine Indian life in the time before the French and Indian wars. Archaeologists have recently learned, for example, that much of the Maine coast, including some of its larger islands, were inhabited yearround during the last 5,000 years. The idea that prehistoric Maine Indians spent their summers on the coast and their winters in the interior we now find is just a myth. After European contact such a pattern might have been a reaction to the disruptive effects of European disease and the fur trade in the 1600s. Certainly many more Indians lived along the Maine coast than in the interior in prehistoric times, and the islands of the Maine coast played a very important role in prehistoric economic and social life. We have only begun to learn the details.

Modern archaeological research in Maine began in 1968, ending a gap of 40 years from the glory days of Warren K. Moorehead and C. C. Willoughby. Modern research archaeology along the coast is the product of just a few individuals who work for the State or the University system, and we continue to surprise ourselves with unexpected discoveries, while most of what we have learned since 1968 hasn't yet been incorporated into the school textbooks.

A census of the number of houses and warriors in coastal Indian villages of New England and French Acadia, taken about 1605, allows us to guess that the coastal Indian population of what was to become the State of Maine numbered perhaps 10,000 to 15,000 persons. The majority of these people lived along the coast from Penobscot Bay west and south. (Perhaps another 5,000 to 10,000 people lived in the vast interior of Maine.) Between 1616 and 1620 a virulent epidemic of European origin swept down the coast from Massachusetts Bay. Its reported symptoms suggest hepatitus. In any case, local mortality rates reached 100% in some areas in southern New England. The average mortality rate for the Maine coast south of Penobscot Bay probably was between 50% and 75%. The epidemic essentially destroyed the social and economic structure that had characterized prehistoric Indian society. Most historic descriptions of Indian life refer to the life-style that developed after the epidemic in response to the European controlled fur trade, and warfare. So our major source of information on prehistoric life must come from the archaeological, rather than from the historical record.

Maine's coastal islands have been used for at least 7,000 years. On rare occasions spearpoints are found washed out on Maine beaches that are identical to spearpoints which have been dated to 7,500 years ago at several inland sites in New England. We also have found shellheaps that preserve archaeological deposits as old as



Kidder Point dig near Sears Island

5,000 years at their bases. However, most of the shellheaps of Maine's coast and islands contain deposits dating 3,000 years of age and less. Our problem, of course, is that the Maine coastline is sinking or sea level is rising, and campsites on the immediate shoreline are destroyed by erosion. The coastline is sinking fastest in the Eastport area (9 meters or 30 feet, in 1,000 years) and at the New Hampshire border (about 10 feet per 1,000 years). Luckily for us, the rate of coastal subsidence has been much less along the central Maine coast. In fact, the submerged stone tool remnants of a campsite dating about 6,000 years old have been found in 25 feet of water near Deer Isle in Penobscot Bay, indicating an average subsidence rate of 4 feet per 1,000 years.

The sinking of the land allows the worst storms (perhaps once a decade) to cause further erosion. In the next hundred years we will probably lose 50% or more of our remaining prehistoric archaeological sites located on the coast and islands! The great shame is that 100 years from now archaeologists will undoubtedly have improved field and laboratory techniques that will produce even more clues to the past. The solution to this problem seems to be to continue scientific excavation at a reasonable rate with the best available techniques, but to begin building erosion control walls in front of the most valuable sites. Unfortunately, money for such work is in short supply.

The vast majority of prehistoric sites along Maine's coast are commonly called shell heaps or "shell middens" to archaeologists, because of their visible content of broken clam or mussel shells. A few sites are almost shell free: their soil matrix is a black loam without the inclusion of shellfish refuse. Only one of these nonshell midden sites on the coast has been intensively investigated: the Goddard Site on the tip of a peninsula in Blue Hill Bay. This site is atypical in many respects when it is compared with several score shellheaps on nearby small islands, Deer Isle, and the mainland coast in the vicinity.

The Goddard Site was inhabited during warm season months only, roughly May through October. We can make such determinations by studying annual layers in the teeth of the Indians' food animals, such as seals and moose, and from calcium deposits inside bird bones which increase with the coming of egg-laying season.

Because we can also read microscopic annual growth layers in soft-shelled clams, we know that the Indians collected shellfish mostly from late winter and spring from February through April along the Maine coast. Thus the Goddard Site, which was most heavily occupied between about 800 A.D. and 300 A.D., was atypical in its lack of shellfish and in its restricted warmseason occupation.

The evidence from the shell midden at the Turner Farm on North Haven Island proves this site was occupied year-round for hunting, fishing, and bird catching even though most shellfishing took place in late winter or early spring. We know that a third site at Kidder Point just north of Sears Island in Searsport was occupied from late February through September. Thus, we know that at least some of the larger islands were inhabited on a year-round basis and, many were inhabited during the coldseason months.

The Goddard Site in Blue Hill is also atypical in its large size (several acres extent); its high concentration of artifacts which reflects very intense use, and its subsistence orientation focussing on the hunting of seals and sturgeon. The discovery at Goddard of a Norwegian Norse silver peeny (minted about 1070 A.D.), an Eskimo stone tool from Labrador, and large quantities of flaked stone tools and fragments of "exotic" stones from Nova Scotia, Labrador, New York, and elsewhere in the Northeast; suggest that trading things, including perhaps wood and other perishables, was one of the principle activities of the people who inhabited the Goddard Site. The intensity of use of the site, the inhabitants' apparent disdain for laborintensive shellfish harvesting, and their concentration on hunting of large meat and fat packages (seals and sturgeon) suggests that the site supported a large population which was intensely busy with social activities.

S ince the Goddard Site is unique so far, we don't know whether the choice of a mainland shore location for such a gathering spot, as opposed to an island, was made for some good reason or not.

We have already mentioned the Turner Farm on North Haven, which was occupied year-round (or at least during all seasons of the year); evidence which implies a resident population on the lower Penobscot Bay islands. We have the impression that the groups that used the Turner Farm were smaller than those using the Goddard Site. The Turner Farm occupants were successful year round moose and deer hunters: of harbor and grey seal hunters during several seasons; hunters of seabirds in their seasons of abundance (spring and fall for some, winter for others); inshore fishermen for flounder. sturgeon, sculpin, and other fish species; and shellfish collectors

during the lean months of late winter and early spring.

Although we have very limited comparative data at present, it is possible that such year-round campsites are confined to the mainland estuaries and to the largest islands, since deer and moose hunting appears to have been an important addition to the maritime resources. We don't really know how campsites on smaller islands fit the picture. I suspect that late winter/early spring camps, located near clamflats and occupied by small groups of people, may be the most widespread site type. Since the prehistoric population would have had to disperse to avoid starvation during the season when food was most difficult to find.

Only one shellheap has yielded complete quantitative information on clam harvesting versus other kinds of activities. This information comes from a small, thin, shellmidden on a portion of the Kidder Point Site in Searsport, which was totally excavated in 1982. This area yielded about 15 arrow or spearpoints, 70 scrapers, remains of 15 pottery vessels, bones from at least 2 moose, 6 deer, several seals, bear, beaver, birds, and 50,000 soft-shell clams. Apparently, two-thirds of the clams deposited in the midden were collected in the first two months of this 6-month occupation which lasted from late February through September. During these two months (late February through April) clams were the staff of life, gradually diminishing in importance as nesting birds, then deer, seal, and moose were added to the larder. Although this site is atypical in that it lacks fish remains, it demonstrates that even though clams were less than 10% of the year's meat supply, they were an absolutely critical resource for the leanest part of the year. Maine's islands, of course, have more clamflat area per area of land than does the mainland coast. Thus, the islands probably helped maintain a higher Indian population than would otherwise have existed along the coast were they not there.

When best preserved, shell middens seem to be composit accumulations of shell dumping areas interspersed with relatively shell-free soil or gravel-paved living areas. Very rarely, wigwam floors were discovered surrounded by a ring of shell which must have banked the now-rotten away wall of the wigwam. Although none have been fully excavated and analyzed, these perfectly preserved houses are our key to understanding prehistoric family activities, and answering such questions as which were women's jobs, men's jobs, how many people lived in a house, etc. The author is aware of only four such sites; they are all preserved on islands that are not often visited today. Even slight disturbance in one of these sites would ruin a great deal of its potential.

inally, the fragmentary bones of large whales (bowhead or humpback?) occur regularly enough in shellheaps to make us wonder whether Indians actually hunted these animals on a regular basis. There is an account from George Weymouth's voyage of 1605 of Indians in birchbark canoes shooting arrows into a large whale, presumably on the assumption that they could kill him. Since each such whale represents about 15 tons of meat and fat, and since each was butchered on a beach in such a way that its bones were unlikely to be well represented in campsites, we are faced with a major unknown factor in prehistoric Indian life. It is more likely that islands, as opposed to the mainland, were used as whale hunting bases or whale-butchering stations. Thus, Maine island archaeology is important in its own way, as well as for completing the picture of coastal life in general.

We know enough about the time before 3,000 years ago to state that the Maine coastal environment had changed drastically between about 5,000 and 3,000 years ago. Apparently the climate and surface waters of the Gulf of Maine were warmer than they are now from about 8,000 to 4,000 years ago. At the Turner Farm, we know that the Moorehead Phase people of 4,500 years ago were making their living by hunting deer during the late fall, winter and spring, hunting swordfish in the summer, and codfishing during the early fall. A site on Monhegan Island has revealed a concentration of swordfish bone, making us suspicious that off-shore islands were used as special summer camps from which to hunt this warm-water surface-swimming behemoth.

A recent and particularly exciting bit of work is an attempt to begin at the end of this long story. We know a few details about how Maine Indians used our islands from descriptions written on the Weymouth and John Smith expeditions before 1620. We think we have found just the place to compare these historic accounts with archaeological data. A gravel wigwam floor has been discovered shallowly buried in a site on an island in Muscongus

Bay. That floor has yielded early 17th-century European clay tobacco pipe fragments and a gunflint, sherds of post-1400 A.D. Indian pottery, flaked stone tools, and bone tools. Because Indian pottery, flaked stone, and bone were replaced by European metal objects early in the 17th century, and since clay tobacco pipes do not predate 1590 A.D., we are sure this wigwam floor was utilized sometime between 1590 and circa 1620 A.D. We also know from analysis of the bones and shell fragments recovered from the small 1983 test excavation, that the house was occupied in June. and perhaps later in the season, but was probably not in use in April or May. Thus, it seems to be a summer island occupation, and may be typical of the one reported by Weymouth's 1605 expedition.

Obviously, Maine islands have played a special part in life along the coast for a very long time. We have, quite literally, only scratched the surface. More work will be done this summer, and we'll describe the results in a future issue of the *Island Journal*.

Art Spiess is the archaeologist for the Maine Historic Preservation Commission and will be excavating a European contact wigwam floor site in Muscongus Bay this summer.



Bone point and gold button from island test dig

M any people will remember that marvelous moment of insight in their high school biology course when they first learned the notion of a *balanced* eco-system. It was usually demonstrated in an aquarium, where a plant-grazer-gleaner community is established, and lasts successfully for some time. All the ones I ever knew or heard about bought the barn. They collapsed sometime during the academic year, usually due to the death of one of the larger fish or to some inadvertantly introduced effect — pathogens, baby fish, or whatever.

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Inhabited islands are something like acquaria. They are capable of selfmaintainance, but like an acquarium, their functional components lack diversity, and are generally stressed. Compared to a continental community, there are fewer eco-options or strategies by which an island community can adjust to changes. On the mainland where isolating barriers are few and far between, the open, continental system has many more means of adjustment than does an island habitat.

The same may be said of continental versus island communities.

History, after all, is very much like

ON ISLANDERS By George Putz

biological processes. In a traditional context, history moves slowly and changes are evolutionary rather than revolutionary. But the kinds of history Maine islands are experiencing today are not evolutionary. They are impulsive and vigorous, and for all the difficulties of adjustment people are having in mainland towns, they are nothing compared to those being faced by islanders. That an island's human community is like an acquarium is not simply a metaphor or analogue, for social life on an island is quite literally life in a goldfish bowl. Indeed that very phrase is a common homily in island conversation, used both as a brag and complaint. Island studies would appear to be a common ground on which the sciences and humanities can come together; for in both the ecological and social domains, the variables on islands are reduced, the patterns of association more stark and repetitious, in many cases more controllable in the scientific sense, and always they are more fragile.

In any case, I try to bring a scientific spirit to Maine island thought, if for no other reason than that I am from away, an off-island convert, and so am "full of it" from most native islander perspectives. But like all converts, I burn perhaps with a harder flame for island institutions and values than does the natal experience. Because what I know about islands was learned as an adult, it stands out in my mind as reduced, stark, and certainly fragile.

I have several acquaintances in their twenties and early thirties who maintain debt services on financing well in six figures in the midst of what is on the outside an aw-shucks business.

The first thing a naive, enthusiastic, potential convert to an island does is to explore and adopt as one's own whatever myths of the adopted place one can discover. This does not mean myths in the sense of stories or what is not true, but rather those motifs, images, and values that are traditional to a community, and which persist in spite of history and gross social changes; ideas learned amidst the children of a place, even though the adult realities may be very different. In the case of Maine islands,



these myths are those of the American frontier, but with Yankee underpinnings of historical and sentimental depth, of severe skepticism, pride and reticence, and an elaborate embellishment that derives from maritime and nautical requirements.

This list of islander characteristics is familiar; but in each case the features are writ larger and are more stark in an island context:

- Independence; small boats and social circles demand it if a personality is to survive.
- Loyalty; ultimate mutual care and generosity, even between ostensible enemies.
- A strong sense of honor, easily betrayed.
- Polydexterous and multifacited competence, or what islanders call handiness.
- A belligerant sense of competition, interlaced with vigilant cooperation.
- Traditional frugality with bursts of spectacular exception.
- Earthy common-sense.
- Opinionated machismo in both the male and female mode.
- Live-and-let-live tolerance of eccentricity.
- Fragile discretion within a welter of gossip.
- Highly individualized blends of spirituality and superstition.

- A complex oral tradition, with long memories fueled by a mix of responsible record-keeping and nostalgia.
- And, finally, a canny literacy and intelligence.

O bviously, any viable yearround island community must be primarily maritime in its economic focus. Merchant and service functions would be crippled if not irrelevant were the maritime sector not functional. I subsume, by the way, the economic effects of the seasonal community under a maritime rubric, since they are generally about for the express purpose of being "by the sea."

Until the late 1950's the maritime economic focus of the island I moved to fit the traditional values and character most people associate with self reliant islanders. Central to this fitness was the ability to create and maintain virtually everything required for an equitable and ordinary life — houses, food, clothing, boats, equipment and gear, entertainment and fun. If you could not make it yourself, it was readily acquirable by trade in time and kind.

Many things conspired to end this fit; most particularly advances in several mainland technologies. Small gas engines grew into the Chevy-Olds family of V-8 engine blocks; there was an explosion in electronic navigation and communication technology; and finally synthetic fibers, coatings, plastics and bonders all helped encourage an irreversible shift from labor- to capitalintensive efforts. And with capital, comes accounting, and a vastly more complicated participation in the world of the mainland. What you once made, you must now buy. What once you repaired, is now placed in the hands of a specialist. And of course the paperwork mounts all the while. It is a vigorous process. I have several acquaintances in their twenties and early thirties who maintain debt services on financing well into six figures in the midst of what is on the outside an aw-shucks business.

Islanders are also adapting to rapid changes in the seasonal community, and the inevitable growth of tourism. Islanders, not yet convinced of middleage, remember when their ancestral properties, including whole islands, were sold to that young professional couple from away for \$4000. Islanders are increasingly aware of whole streets and neighborhood sections where once fresh laundry snapped in the breeze, bicycles and skates infested the walkways, and toothsome chitchat collected in a reliable network of ears; which now have a dank, lonely, boarded-up and almost deathly character for 9 months a year. Caretaking and maintainance become increasingly available options, though attended of course by a general propensity to care less about the property of others, as increasingly "others" exist outside the circle of community sentiment.

I suspect most readers of this publication love islands and have a deep place in their heart for their inhabitants. Yet many of those same hearts believe that conventional seasonal tourist-based development can benefit Maine island towns. Yet, for the life of me, I can't see how that can work. Tourism, in particular, is a direct anathema to everything that allows islands to function with community integrity. It's one thing to live in a gold fish bowl with neighbors that share generations of curious history; its quite another to be behind an aquarium glass for the entertainment of total strangers.

My own suspicion is that the growth of seasonal tourism fundamentally betrays a sense of pace; of island time. As we learned in school, and have since experienced in the marketplace, the host continental American character is one that believes in Destiny, in a sort of time frame that stretches to the horizon. To be sure, islanders are not without a sense of destiny, but their primary sense is one of Fate. Even the most active and successful fisherman and his family knows that it could all end tomorrow, that luck permeates one's energies and skill, and that it is cycles in life that truly rule one's being. This constitutes powerful grounds for alienation from the ways and means of the mainland culture and its imposing representatives.

It's one thing to live in a gold fish bowl with neighbors that share generations of curious history; its quite another to be behind an aquarium glass for the entertainment of total strangers.

Islanders feel isolated, because they are isolated; and the consequent reticence and sense of irony that comes out of this isolation was much more compatible with the aspirations of the rusticators and pilgrims of old, than with the active, can-do, do-good inclinations of the modern visitor, seasonal resident, bored but hyper-active retiree, not to mention fulltime midlife transplants with firm notions of what's good for other people.



H ospitality has always been nearly a religion on islands, but it now must compromise itself and become ever more choosey as islanders have to know in advance, for instance, which visitors appreciate the smell and sounds of maritime work. Those who don't like it, or worse, don't under-stand it, are threatening. Islanders share Hegel's wisdom that there is nothing more dangerous than ignorance in action; and on islands there is too much for anyone to know.

In the political realm these differences have unique consequences. Islanders who identify themselves as Republican are not so much Republicans as they are Torys; and not Torys in the traditional Anglo-American sense, but almost in the French manner where the feelings of patriotism are, root and branch, centered on the home and a circle of one's local experience with a deep fear and distrust of authority in all its manifestations. And Democrats, too, are not so much Democrats as they are Populist Libertarians who join with island Republican-Tories in a politics of prevention, rather than of initiation. Family and fellowship patterns conspire to keep things in balance. Intrusions are resented and sometimes a seige psychology predominates, as if in the midst of an occupied people; allowing a relative liberal freedom of individual action at its best, and a propensity to vigilantism at its worst.

Finally, the societies that have essentially run an island's social machinery for over a century find in post-Viet Nam adults a waning vitality. And the annual difficult season of late winter when budgets and chemical radicalism most threaten the domestic order becomes ever more destructive, as the media and wherewithal to do so brings mainland experiences home; literally building bridges in the air.

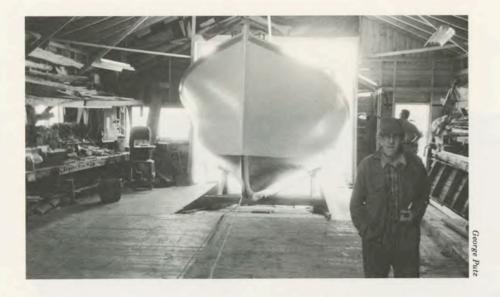
I t is, at the very least, bad manners to care about any aspect of an island and its phenomena, without caring also about its people - past, present, and future; not with sympathy and patronization, but rather with empathy and plain honesty. For it is for good reason that many, if not most, conservation and preservation efforts are viewed as a kind of class predation by islanders. Until interested personnel in conservation and research understand islanders, whole realms of knowledge and experience simply will not be open to study. Ninety percent of the useful information to come out of island study is known already, scattered through the hearts and minds, attics and backyards of islanders. Much of the vast material is yet to be discovered by researchers.

So much for preparations; What is at stake in the midst of the furious pace of these changes?

First, islanders are among the last Americans who as a group can presume their sense of *place*; that they are where they are and who they are by patrimony, choice or privilege, and not by requirement or opportunism.

Second, islanders are hunters and gatherers by tradition and instinct. Within bounds of strictly understood codes of decency, the world and its inhabitants are resources. Within the sentimental circle life is a shared game. Outside of the circle there is game only. This





has enormous ramifications for scientists, researchers, preservationists, island owners, and so on; and is by no means necessarily bad news.

Third, and in apparent contradiction to the above, islanders are extraordinarily good and assiduous nurturers and husbanders. The usual outsider's impression that commercial fisherman are strictly exploiters, fail to notice the fact that lobstering has become mariculture. Bait is in fact feed, and 9 out of 10 lobsters that are caught and kept, have been caught dozens of times previously and then thrown back onto the bait at the bottom. The notion that the average fisherman is out there daily, hammerand-tong against his fellows - cutting off, exploiting shorts, shooting Bambi for fun and all that, is simply wrong. Island life is precarious and always endangered. It takes a great deal of care and circumspection to make it work.

Fourth, the feelings of isolation and the uncanny sensitivity to signs of a change in the weather and what it can bring, gives islanders an unusually keen sensibility to natural history. This is sometimes unconscious, but it is powerful; the extraordinary powers of observation and interpretation among fishermen, are quite naturally matched by a general awareness of nuances in the environment among all hands.

Fifth, there is a self-consciousness about islandness among islanders. I call it cellarhole melancholy. This is a generalized sense of loss, of what could have been, of what probably happened that shouldn't have; of the blood, sweat, and tears that permeates every foot of island rock, soil, and beach. And all this adds up to a profound wisdom even among the least endowed islanders. In a sense this is the island's use of its people, rather than the other way around. While not a source of happiness, this is nevertheless rare and precious.

Sixth, island institutions are deep and traditionally effective, for they seldom operate solely for the advantage of their members. What *is* gained in them is a

celebration of identity and fellowship. They are a blend of romanticism, of oral literature, of forum, of unity in rites, of security, sharing, of wit, art, commiseration — all the truly important things in life. They center about the fish houses and kitchens; and though wire and synthetics have denigrated one, and packaged pre-processed food the other, any person without welcome in one or the other, is doing badly.

Island life is precarious and always endangered. It takes a great deal of care and circumspection to make it work.

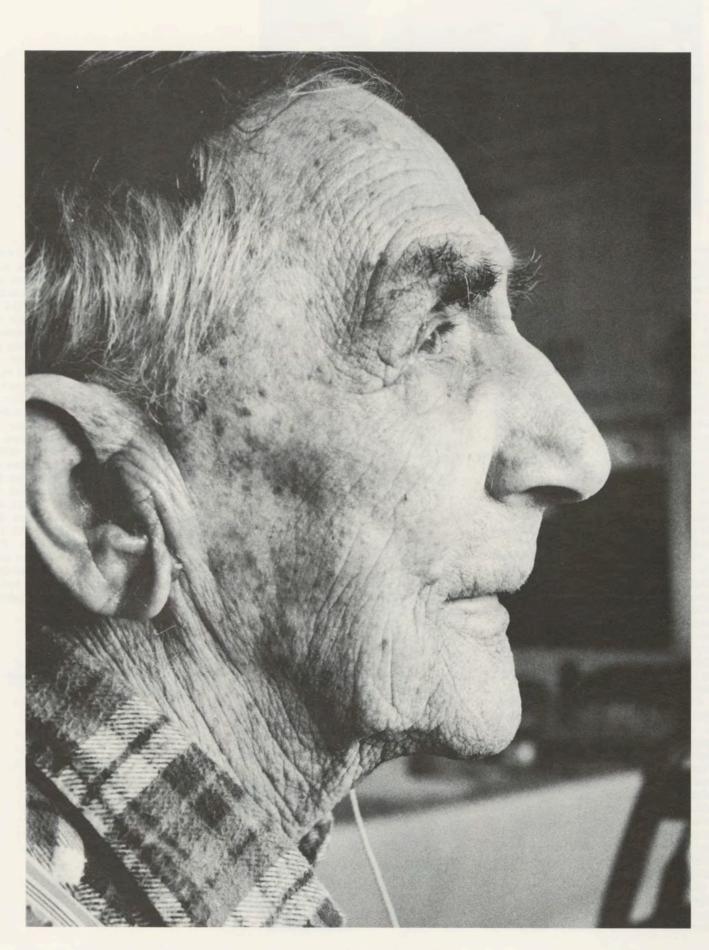
Seventh, there are the heritages, used symbolically on islands on a daily basis with all their myths, habits and stories, incumbant skills, traditions and uses. There is a lifetime of study and work in these heritages: fishing, boats, and boatbuilding. Quarrying and stonework. Farming and forestry. Architecture and community design. Arts and literature. Trail and shores. Hunting, gathering and folk crafts. Even science. For all island towns have their archaeologists, rockhounds, birders, flower-pressers, woodlot managers, whale-watchers, and so on, and many of them are doing first class work. Islanders share a common sense with other islanders worldwide, in



much the same way that scientists share a common sense worldwide on such things as denotation, logic, control, and proof. That sense of relief a scientist must feel as he or she walks into the lab or department to be among one's colleagues is, I am sure, much the same as what islanders feel when finally they get back aboard the boat headed home.

America needs her islanders. It is, of course, fatuous and arrogant to speak ofpreserving island communities. The die is cast and history shall have its way. But there is still in the Maine Archipelago and on islands elsewhere, an intact vision of the world which differs from that of others and which offers not merely diversity and its advantages, but a sensibility about the world that the world could use since citizens everywhere are coming to realize that the earth itself is an island. In this sense, mainlanders are the Pre-Copernicans, and islanders are the most sophisticated, modern, and up-to-date. Islanders know about islandness and all of us should have some of this imprinted on our consciousness.

George Putz is a resident of Vinalhaven and Senior Editor of Island Journal. George is also the author/co-editor of many books and articles for national magazines.



PROFILE: ERNEST MALONEY

Edward Maloney celebrated his 91st birthday this spring. Born in 1893, Mr. Maloney lobstered out of many harbors around Muscongus Bay for 50 years. He talked to us from the kitchen of his home on Horse Point in Port Clyde where he has lived for the past 61 years.

We asked Mr. Maloney to tell us about the 8 years he lived on Benner Island beginning in 1910.

E.M. There's Burnt Island, then there's Allen Island and then across from Allen to make the harbor is Benner Island. I used to live on Benner. I don't know for sure, but I think it must have been 1910 I went down to Benner. I stayed out to the island there one or two separate years with my father. When my wife and I got married, we went down to the island and started housekeeping. That was, I got to think, in 1916. We stayed out there for 6 or 8 years straight until our daughter, Enid, got old enough to go to school. I.J.

What brought you to live out on Benner? I was lobster fishing. When I first started out, I had a little Friendship Sloop. Twenty-six feet. Wilbur Morse built her. He took the center board out and put an engine in. I gave \$85 for it. The boat didn't have but a very small engine, a 5 horse make and break. Had to crank it everytime. It didn't go over 4 or 5 miles an hour. You hauled by hand when you went in the sloop, and when you went in the dory, you rowed and hauled by hand. I didn't have anymore than 75 traps.

I fished outside most of the time, out to Monhegan in the winter. It was tougher'n hell. You'd come in from hauling and have to get a fire up in the stove and stand up to the stove and thaw your oilskins out till the bottons would fly off. Then you'd put a potato on to warm and warm up whatever else you had, a can of corn or a can of peas or some damn thing. You didn't live like a king.

I.J. How many fishermen were out there?

E.M. In the summer there were close to 40, and in the winter, they'd only be. . . Oh I don't know, 6 or 8.

E.M.

In the summer, about all the men fishing went in row dories. There was a big crowd from South Waldoboro that went fishing in row dories. They hauled till Thanksgiving.

I.J. Were there other islands on Muscongus Bay where people lived?

- E.M. There was an island above - Seavy Island or Thompson Island it's called on the chart. A man and his two sons used to lobster there. Over to Teel's Island they had a school. And then all the islands, like Caldwell, had someone living on them in the summer.
- I.J. What did islanders do for a doctor?
- I never knew there to be a doctor on the E.M. islands. There was a whiskey bottle for a doctor. And a lot of it.
- I.J. What was the harbor like in the winter?
- Oh we had a nice harbor, one of the best. A E.M. beautiful harbor down there. You'd be surprised. Outside the mouth of the harbor, it'd be rougher than hell, but the tide would run down through, and it was just like putting a board through a planer. It would plane it right off. It was just as smooth in the harbor, you'd never see those small boats dip their bowsprits.
- I.J. How did you sell your lobsters?
- E.M. There was boats come in. There was one smack that came in the harbor everyday from what they call Lawie, Maine. That's up the Waldoboro River (Medomak River). His name was Lawry that had the smack. He had a lobster pound up there. I.J.
 - What did you use for bait?
- E.M. Oh, there was bait boats that would come with bait. There was a lot of boats from over around Bremen, that way, that was bringing bait all the time. They'd even go up the Sheepscot River and get it. Then sometimes the seiners from Monhegan would come in with bait. We used alewives or herring. We didn't

have brim or redfish, just them old herring. Sometimes we'd cook the alewives if we had nothing else. But they were bony. You'd have a hard time taking off your sweater after eating them they were so bony. You didn't live very high.

- I.J. What's the worst storm you remember?
- E.M. I don't know but I've seen some good ones. I remember it blowing the tower down on Burnt Island (at the life saving station).
- I.J. Did you see much of the men from the Life Saving Service on Burnt Island?
- E.M. Oh, they spent their time watching the shore, I suppose. But it must have been awful monotonous. They didn't get very big money. That wouldn't be no life for me. I'd rather do hard work. Once I lost my mast off of Burnt Island and I was drifting down on some ledges. But they never came; I guess they didn't see me.
- I.J. Did you visit back and forth much?

E.M.

Well, every week they'd always row over in their life boats to the store. Gil Martin had the store out to Benner. He was originally from Brooklin. It was a good location for a store. He did alright for himself. He lobstered some and had this little store. They had a lot of liquor in them days. He sold anything. All that canned stuff, boughten cookies, things like that. But in the summer we got our meat from the meat boat.

One winter the storekeeper got out of butter and his pork was strong. I couldn't eat nothing that didn't taste like that old strong pork, so I came off the island. It was bitter cold; you could just see the tops of the island through the vapor once in awhile.

When I got into port I happened to see the meat cart and there was a lady who cooked food to sell. I guess I ate like a king that night. I stayed aboard the boat and my bedclothes froze right to the bulkhead and to the ceiling. That wasn't very pleasant.

I.J. Who were some of the men who fished with you?

- E.M. Well, there was Art Flanders from South Waldoboro. There was Lester Burns from what we call Back Cove, and Jim and Ralph Benner from on the Friendship Road. And Sam and Cy Simmons and Almond Simmons was there on Allens. There was quite a bunch of them. And there was quite a bunch from South Cushing.
- I.J. Did you do any other kind of fishing from the island?
- E.M. Oh, I went to haking a little in the summer sometimes. We'd set a trawl down to Monhegan way. But it was a short season for hake. And then you'd only get 50 or 60 cents a hundred for your fish. Now it'll cost you a couple of dollars for a real piece of hake.

I.J. How much did you sell your lobsters for?

E.M. I'd like to have today what I sold for 12 cents. They went to 10 cents once, during the Depression, but I wouldn't sell. I carred them. I'm going to tell you, you didn't have much of a job to count your money. It was hard business.

- I.J. How many houses were there in the harbor?
- E.M. My aunt, Sarah Seavy, owned the house I was in and a small junk of Benner Island. They always told me the house was moved down there from up above Howard's Head, from a cove they called Crazy Cove. Years ago they used to do quite a lot of business there, buying fish in Crazy Cove.

There was the store and there was one other house, and I don't know but what there was a dozen camps. On Allens Island across the way there was a big house, a farm house. There was an old man by the name of Luther Poland lived in it when I first went down to the island, who took care of the sheep. George Wellman, he used to live on there Buttermilk Lane in South Thomaston. He butchered. He and another man, I can't remember his name, they owned Allen Island.

There was a family over to Friendship by the name of Chadwick that owned Burnt Island and quite a number of the islands down through. Now the summer people own them all. All of them islands had sheep on them back then. I don't know one island that didn't have sheep on it.

- I.J. Why did people keep sheep on the islands?
- E.M. Well it was easier to pasture. You didn't have to build no fence. The sheep didn't have much to eat sometimes. They'd eat a lot of rockweed, kelp. After a storm, they'd get down around the shore and eat kelp that got carried up. Also, you know sheep require very little water. You can tie one out there in the summer and not give it water and it won't choke to death. In the summer when they sheared they'd get the fishermen to help drive the island. You'd get a junk of lamb for it. I don't know what breed they were. They were just sheep, far as I was concerned. Now that there's all this synthetic stuff, wool don't have the market it did in them days.
- I.J. Did you keep any other livestock on the island?
- E.M. I had a cow down there one summer. This Wellman kept cattle and Luke Poland bought a cow from him. She was supposed to be farrow but that farrow cow had a calf. I bought it. He helped me move it over from Allen Island to Benner, and I kept it there until we moved off in the fall. the Monhegan Mail boat came in and got it and brought it off to Pleasant Point. It made quite a mess of the boat. Yes sir, quite a mess.
- I.J. 91 years is quite a long time to look back on.
- E.M. I'm going to tell you something. I've done something the other day that you've never done, probably never will. I kissed a woman on her hundredth birthday. But I don't want to live to 100. I'm going to tell you another thing: when you're 91, you are not 19 anymore. Be damned if you are. You can't get around or do for yourself. To hell with old age.

WALL STREET EAST Island Technology By Lance Lee

Sam Manning

Delivering island livestock, Mahone Bay, Nova Scotia

Editor's Note:

One of Maine's most creative and indomidable educators, Lance Lee has directed the Apprenticeshop for over a decade. He began with the idea that ancient trade skills were not only worth recording; they were worth preserving in the daily activities of American citizens in the late 20th Century. He chose boatbuilding, not only because it is indigenous to Maine, but because boatbuilding is a whole range of trades and skills, with applications that pertain far beyond nautical craft. Beginning with lots of hope, little money, and a handful of enthusiastic prospective boatwright apprentices, he and his students built housing for the program, and an extraordinary boat shop on the banks of the Kennebec River at Bath, under the auspices of the Maine Maritime Museum, then the Bath Marine Museum. In ten years 80 apprentices moved through his tutelage, building 120 boats of the highest quality. Today his program continues in Rockport, Maine, where, as always, he seeks with his apprentices a broader vision and relevance for what it means to be a competent productive person. He looks toward the islands, where in fact his career began, and to which he intends to apply the program's work in the future.

I slands have been bastions of simple, ingenious, energy-wise, make-do methods; often old, and usually dependent upon principles as timeless and "low-tech" as the tide, the grass, or the lever. For most of the past decade the Apprenticeshop of Rockport, Maine has prowled the east coast from Newfoundland to the Caribbean collecting and recording distinctive methods, tricks, and ways of getting a job done which may best be described as "intermediary technology," to borrow E.F. Schumacher's telling phrase. Our system of banking this kind of know-how is known as "Wall Street East" at the Apprenticeshop, and to a broader world as the "Technology Bank". It shouldn't be surprising that the best stories and materials in it have been drawn from islands.

had the shirt we shi

Unlike its namesake, Wall Street East is free from the mysteries of fluctuation, the terrors of inflation, and the suspense or the perils of stepping off the curb after three o'clock. Interest in our Technology Bank is growing, though it is not tied to the size of the deficit or the prime rate.

From our island file: In Trinity Bay, Newfoundland, "dirty water", a dark viscid deposit thrown up by gales clogs the nets of cod traps temporarily destroying their utility. Cod, instead of swimming into the semi-invisible twine, shy away from a brown wall. The solution is not to coat the nets with an anti-fouling substance. Rather the nets, covered with the heavy, clinging slime, are simply pulled and laid out in a field. The grass "eats dirty water" as Edward Toope, our informant, showed us, in a mere six hours.

In the northern Bahama Islands less than four decades ago, conch shells were saved and stacked with interspersing layers of scrap or drift wood and burned in pyres to make lime. The conch shell lime was then used both for mortar and for curing canvas to hold mildew and rot at bay from the sails of smacks, sponge boats and dinghys. Aside from the careful second use of the conch resource, the shells were brought ashore rather than cast back into the water where they were taken. These days when shells are dropped overboard by conch fishermen, live conchs, acting on an instinct parallel to far more advanced forms of life, leave an area in which they encounter the other conch remains and those fishing grounds are temporarily destroyed.

In Penobscot Bay, Maine, the uprights of many boathouses, cribs or similar structures are anchored to irregular ledges as follows: an iron or steel pin is set in a hole 4 - 6 inches deep, cut with a star drill to a larger diameter than the pin. Then hot lead is poured round the pin which stands about 21/2 inches "proud" above the rock. The pin is then inserted in a hole bored in the foot of the upright to prevent its skidding. When and if the structure is dismantled to leave the shoreline uncluttered, a blowtorch or the equivalent is played on the pin, melting the surrounding lead and allowing the pin to be easily pulled with pliers.

In Mahone Bay on Nova Scotia cattle and oxen were transported to Tancook Island from the mainland in "Lunenburg banking dories" too old for working from banks schooners and sold cheap for in-shore work. Two dories were beached on an incoming tide. Beasts were induced into the boats by two men and accommodated for the passage as shown in the accompanying drawing. On the island, because of the low tide mud, the animals were induced out of the dories at high water and allowed to swim the last lap. Our source, Mr. Perry Stevens, allowed as to how you "get a pole under the fore and another under the hind legs and you 'pry' them out." He noted that the last effort could be pretty humorous at times, and that the attendants sometimes had a chance to swim the last lap too.

I sland methods or "intricate tricks" as Elliot Wigginton of *Foxfire* has called them, die out more slowly than mainland methods. On the mainland ways of doing things are displaced more quickly because of a more transient labor force, greater affluence and less deeply rooted habits. By the same rule, the more remote an island, the more likely we are to find older, energy conserving and ingenious ways of accomplishing things.

The Apprenticeshop believes that such older practices, occasionally married to hi-tech materials and machinery Buckminister Fuller's philosophy of "more-with lessing"- constitute one of the hopeful ways in which new economic life can be sustained on outlying islands. For example: last week on a Massachusetts island the Tech Bank studied the work of a man cutting plank stock for a thirtysix footer already abuilding there. He was using a chainsaw mill which together with the aluminum jig or frame cost less than \$750 and he was cutting clean, uniform plank stock with less taper than we have seen in a number of standard New England sawmills. Paired with the butt logs, he has dug into the dirt floor of his generatorpowered boatshop as 'pedestals'' for the new sloop, you have a traditional tech-hitech marriage fit for the finest French champagne.

LANCE LEE

This article is a forerunner of a longer, more detailed one entitled "Wall Street East-the Apprenticeshop's Technology Bank" which will appear in a future issue of Island Journal. For some years the author, Lance Lee, and draftsman, Sam Manning, have been developing a "Red Pencil Process". They invite and urge readers to correct, update or expand on the drawings and written material presented, doing so in the interest of overcoming inadvertent errors and expanding the Tech Bank. Please help the 'Shop if you have such knowledge.

SEQUIN The Small and Shining Object By John M. Garber



John Garber, the rower

That's what Sequin is. In French. In my life. In the dictionary. On the old Deeds. A Small and Shining Object.

But not on the charts. Over the years the Q became slurred and the island is called Seguin — same spelling as the Seguin at the mouth of the Kennebec about 150 miles away, up towards Boston.

"My" Sequin is at the eastern end of Moosabec Reach. I pay taxes to the Township of Jonesport; but all of Sequin's cultural and social ties are with Beals Island: the Oscar Wallace Jr. family, O. L. & R. A. Carver's General Merchandise, Beckman's Boatyard, Ralph Davis and Woodard's Store.

Pretty far East, Sequin. The mainland down here is sub-arctic: blueberry barrens, larch swamps and peat bogs. An egalitarian society. Never rich as was the Wiscasset region for example. No lovely old mansions built by sea captains. No sir. Just woodcutters, fishermen, and pirates: pulp logs and migratory workers. Bloody frontier wars for a couple of hundred years, a backwoods pawn of the great European empires. Indian raids, genocide and long winters. That was Eastern Maine. On the coast, today, most disposable income goes into CBs, beauty parlors, pickup trucks, and the incredibly beautiful lobster boats. Young couples and old couples live in neat trailers. To escape fog a family may have a summer camp on a pond inland; but their regular houses are all about the same size and small.

I say "my" Sequin; "my" island. But it is, of course, no such thing: at least I don't kid myself about that. In the short term the island "belongs" to the birds and the fishermen. As to the long term, the notion of land ownership is a delusion, a dearly held untruth that may lead to our extinction. We are merely tenants of the earth, or at best stewards. I've appointed myself Steward and Lord Protector of Sequin for a while. Some of my friends call me Sir John.

At Sequin, each year, I resign myself to my intrustion as I scuff the lichens and break in the familiar path to the tent platform. I counteract my rude behavior with defiance... "Well, I've got a right to be here too..." But I don't really believe it. So, like a person in religious orders, I've placed a great many restrictions on myself most of which are absurd to others, and some of which are downright painful to all. Such as the yearly lug of camping gear from the Front Beach to the Tent Platform.

You know how it is: we seek immortality through our summer vacations. We pretend they will last forever. That's why we take the 15 books, the unfinished 'craft' projects, the five extra sweaters. Plus the Expedition Syndrome, the 'just in case', the unneeded collapsing candle holder from L. L. Bean, etc., etc.

Every year the heap is larger on the Front Beach and Oscar Wallace Jr. more resigned as his lobster boat, the Wendy Gail, is reburied in yet more paraphenalia as I perfect my lists to include what I forgot the year before. And then the reverse, the leaving, is worse. It's always raining, stormy, and low tide. "Got to git out Jawn - or it'll bee too late" sez Oscar. There's the original stuff plus all those lucky pebbles, accumulated trash and unused cans of Campbell's soup, that souvenir lobster buoy for Joan. As the Intrepid McMullen said. . . "there's a wonderful difference in being outward bound for pleasure and homeward bound of necessity.'

So why don't I make camp on the Front Beach? Why this annual three days of cursing and trampling down the blueberry bushes?

Because the lug is part of the coming; and you can't camp on Sequin without it. A trauma, a birth, a delivery into life on the island. If you can take it, the rest is joy. And you pay again for the joy on leaving with a hangover of new possessions.

But I didn't know about this when I chose the camp site that first year. The site was chosen because it seemed snug from the wind, because the lights of Jonesport were out of sight, because the camp itself is out of sight from the traffic on Moosabec Reach and Sequin Passage, because it looked east to the sun and south to the moon, with a nice little view of the open ocean. And because. . . Mordor is out of sight.

Mordor, named for the place of the same name in the Tolkein books, is said to be the largest radio transmission station in the world. At about 10 miles to the east of Sequin on the next headland, and not noticeable in the daytime sea haze, are 14 needles, each higher than the Eiffel Tower. At night they fill the horizon with a fascinating and dreadful sequence of evil red lights and send messages... to? It is a military installation run by the Navy, delicate filaments of power with a latent code for The End.

I had bought the first half of Sequin before landing there on the basis of an aerial photograph and a distant view from Clifford Alley's point on the east end of Beals. There is no place to hide. Well I knew this, in principle. I had been in the environmental movement for 20 years; 'no place to hide' is first in our catechism. But it is one thing to lecture other people and another to receive the Zen blow oneself. Especially after laying more than several thousand bucks on the line, seeking isolation.

So. . . I had bought and paid for my shore privilege before I spent the first night on Sequin. When it got dark and Mordor appeared, along with the Great Bear, I had one of the most important religious confirmations of my life.

I sagged down on a rock and could feel the blush fill my face in the dark. My chronic lack of caution, I thought, had done me in again. Sachiko Satoh squatted down beside me and touched my arm.

"John. . . I'm sorry," she said.

But as I sat there the shame was replaced by a welling up of ferocious love: for life: for The Small and Shining Object. Every leaf. Every pebble. To the extent that I could understand them I would protect them. The tensions and joys of this drama have been companions of my existence ever since.

II. The Camp.

There was plenty of large driftwood that first year; it took us only a couple of days to lug logs and planks from the Back Beach to the camp site and construct the first tent platform. My strength seemed to double on the island, and Sachiko, raised as a farm girl in Japan, knew how to carry weights efficiently: knees a little bent, back straight, a sling across her small shoulder.

I had dropped out of a practice in architecture shortly before this time. But once an architect always an architect, so we had a great time playing "less is more" with a bit of Royanji Temple thrown in for the flavoring. The delicious decisions. the choice of this plank or that, which ends to saw off, which to leave 'wild'. Where to use the weir poles when we ran short of the 3" decking; even where to drive the minimum of nails and spikes, some salvaged from the driftwood, some new and galvanized and bought at Carver's Store. And, as an architect, I had, of course, a theory. My theory was Heavy Base (the driftwood), and Floating Superstructure (the tents and a fly).

Of my tents, the wedge shaped Watermelon Tent, a Fred Moss design, is my favorite. The whole side opens up to the moonlight. It is only about three feet wide and too narrow for most couples; but Sachiko was just the right size, and affectionate. Other tents I admire and use are of the external skeleton type. I have several of these for guests and for storage of gear.

Once the tents are up there comes the big architectural event of the summer: the Raising of the Fly.

Each year has produced a new fly, a new interpretation of the Theory. The first fly was truly heroic. It was the size of a mainsail and very heavy. I had it made in New Jersey by a truck tarp outfit of immensely strong reinforced dacron. But the grommet detailing was not up to the luffing action, the eternal flogging in the winds of Sequin which is one of the compelling rhythms of camp life. Because, as it turned out, the camp site was and is the biggest wind hole on the island. As I have said the spot seemed snug; and snug it is, visually, nestled between ledges. High enough to be dry, low enough to be out of the wind, so I thought.

Well, this cozy little spot is a wind tunnel. I had slung the forward end of the fly from a 27 foot mast from an old Monomy Boat. As I hoisted the horizontal sail it gave a mighty crack and the struggle began that lasted till sundown. That day held



Raising the Fly

just a light breeze from the southwest, on the water. Perhaps five knots or so. But it ripped between the protecting ledges, our own Venturi tube, to at least fifteen.

I still don't know how we got the thing under control. But the grommets were spaced every two feet. So, like the Liliputions tying down Gulliver, we finally got the fly tamed. I scrambled around driving pitons into the ledges for something to tie to. I knew ahead of time that the shallow soil on Sequin would probably not hold stakes very well; at least I was right about that.

When the sun went down I stood back a little chagrined but admiring of our spider's web of guys and ties — which we would be ducking under for the next month. The fly was floating now in the evening calm. White, gracious, serene as a Mozart quintet, protective as a mother's breast; and lending to the lean driftwood constructions an irrevocable sense of Place. After lobster that night we took our hot Jack Daniels to the top of the ledge and watched the Theory gleam in the moonlight.

III. The Row.

I like to row. This is convenient because, to the bemusement of most and the annoyance of some, my means of going ashore is the *Peapod* under oar. I still think of the *Peapod* as a new boat. In fact, it was built in 1949 by Drummond Farrin of South Bristol, Maine. Drummond and I spent a year talking about it; we ended up with a modification of the large sailing peapod in Chapelle's American Small Sailing Craft. I wanted the bilges firmed up some.

When I bought Sequin I had the centerboard removed to make more room, wooded her down, added a second rub rail to correct a slight fault in the sheer, and repainted her a splendid International Orange. I've taken so many perfect picture postcards of this lovely craft that my finger aches; but when I see her curves in the sunset I can't control my camera. Ah me.

The row ashore takes between 45 minutes and an hour and a half depending on wind, fog, and above all the tide. The tides down here run strong and big as the Gulf of Maine sloshes up into and out of the Bay of Fundy.

The Front Beach is the front door of Sequin and faces west towards Jonesport and Beals. Now we all know that the word 'beach' is relative in Maine; even shelving ledges are called beaches. In the case of Sequin, the Front Beach is moderate, a crescent of large pebbles and small rocks. But a beach boat is necessary; the pod is much too heavy for this purpose. My present beach boat is a charming nine foot skiff built by Mitch Ryerson of the Lewis Wharf Waterfront Workshop in Boston to his design. I painted it to match the Peapod. It is named "Bean" and I love it.

So, I drag the beach boat down to the water, an activity that is a sure cure for my recurring bad back.

'Ebb is west, Flow is east', I chant to myself. But on the edges of Moosabec Reach, as the tide finds its way around Head Harbor Island, this is not the case. No matter what its state, the tide will be against you for a part of the row. Nevertheless, it is well worth while to catch high water and ride the ebb going in. If the trivialities of human circumstance interfere with this timing, I feel incompetent and think a lot of melencholy thoughts about the vanity of life and related subjects. If I've got the tide under me, and have good company aboard, I'm in a state of grace.

I hug the shore. Regardless of weather. This is because I cannot be too familiar with every rock and tree in case of fog. I carry and use a compass mounted at the left-hand side of the forward thwart. Even in clear weather I check the courses as I go along, noting variables of wind and current. The pod has no skeg. In a breeze she tries to head up into the wind. As a result, if there's no one at the rudder, a lot of rowing is done with one oar.

I coast along the north side of Head Harbor past the abandoned weirs, brave the 110 yard channel over to the south side of Sheep Island, thread through the ledges marked 'foul ground' on the chart. Over to can 5 at the entrance to Pig Island Gut. When I see Clifford Alley's house, if it's foggy, I know I'm home free.

Now this mouse-like behavior has produced a curious result; it has given me a reputation for recklessness. "Jawn! your not goin" out tonight, sez Lorraine Wallace. "Christ — I'll have to come out and find you . . ." says one of the younger fishermen. The older men are more relaxed; they grew up with rowing as a matter of course. For them, my routines are considered to be no more than eccentric. "He'll make it allright," says Ralph Davis.

make it allright," says Ralph Davis. But even so, Oscar Wallace Jr. always checks me out at dawn when he begins to haul his traps. The circumstance of the skiff and the pod are noted; and if I'm up, we exchange the Beals Island Hail — both arms raised above the head so there's no mistaking it. I on the Talking Rock, he on the Wendy Gail. A brother and a brotherhood indeed!

When I row out to Sequin on a foggy evening the concern of my friends ashore reaches me like a radio wave. I feel warmed and blessed as I tie the bowline to the mooring stake; spoken to as I drag the skiff up to the beach. The fog horn on Mistake Island will be doing its familiar thing. I turn the flashlight into the fog. A slight shadow under the dripping leaves marks the twisting path. The fly is quiet. There's a little wine left. I'll have steak tonight.

IV. The Well.

We set about the job of lining the well with stone and without qualms; this project was appropriate to Sequin: an enhancement, a precious secret for the 'barren' island known only to we of the Shinto.

Oscar Wallace Jr.'s father had dug the well at the time he built his hunting camp where the fireweed now grows. The location retains the only deep soil on the island, about 4 feet deep, cradled between two ledges. Over the years, since the fire, the hole had partly filled again. It had not been lined. It was just a hole in the ground. Wearing waders only, I dug out the silt to ledge. A fight ensued.

Sachiko was very handy with her hands: a lightening knitter and slicer of vegetables. Chopsticks were an extension of her body and her use of them was a wonder to behold. And she had a strong sense of craft. After just a week of instruction her pottery had made it to the display shelf at the ceramics school in the village. But she was also Japanese and, on occasion, scornful of the West. Somehow she had gotten it into her head that the Japanese laid stone on edge rather than flat; and that it was typical of a Blue Eyed Barbarian, and crude, to do otherwise. I explained the difference between facing stone and the stone laid up behind to retain pressure. She ceased to understand my English. "What do you mean by?" I had been through this before; so, rather silently, I started to lug stone up from the beach. After the third load Sachiko smiled charmingly and said that she had decided to lay the stone flat after all — because they would have more 'repose' that way.



So in two warm days we did it. I lugged. She laid up the walls. We bailed out the muddy water and carried it over to the seedling fir. And then we watched the clear trickle cover the bottom rock. By morning the next day the well was two thirds full; it stopped at the water table, about a foot below the surface of the ground. In a pail the water was light amber as though distilled from the late summer grasses. And it came to my mind that the well might be there for a thousand years.

V. The Barren Island.

Sequin is described as 'barren' by the real estate brokers. In their lingo this means no trees.

There are in fact seven trees. I've counted them. The most prominent is the toughest black spruce in

Maine. It thrives on the high point of the southern half of Sequin and is in profile as you approach the island from the west. I can even pick it out on a clear day from the Beals bridge some four miles away. The spruce survived the fire that Oscar Wallace Jr. set thirty years ago. He set fire to his father's camp at the southwest tip of Sequin and let 'er rip in a brisk southwest breeze. I haven't pressed him for details. He was drunk he says with a wicked grin, and I figure the rest is between him and The Good Doctor in the Sky. Of course it is the custom in these parts to burn off the barrens to encourage blueberries. So, as in the South Bronx, there is a tradition here that relates to arson.

On our first overnight visit — the night of Mordor — we wandered unsystematically over the island, pausing here and there for no reason. The impact gradually built up: then with a rush, like the B.S.O. in full cry — it came to us and filled our bodies. Rhythms, color, form, noises, whispers, bird calls, rocks and tides pulsed, interwoven, the endless counterpoint of life.

When we came back later that summer I brought some close-up lenses and had my revenge on the realtors. Barren indeed. Then and now when the hum of the lobster boats begins to fill the air, when the dew is still at the saturation point and the shadows are still long, I tour the island with my camera: the high part to the north, the lower part to the south, and the connecting beaches and marsh in between.

The rocks are best in the afternoon.

They are alive of course, rocks are: and mostly female. I first knew this as a child when I lived with them at the close range of my own growth, two, three and four feet in front of my grandmother's house at South Bristol, Maine.

If it's been a sunny day on Sequin the western rocks, by late afternoon, are warmed and as complacent as old ladies on a Broadway bench. They wear their Rothko gowns of faded lichens and gull droppings for caps.

On the Back Beach, after their daily tides, the rounded pebbles come up sleek and sexy and gleaming as a party of playgirls around a pool, and excite each other with massage in the gentle surge.

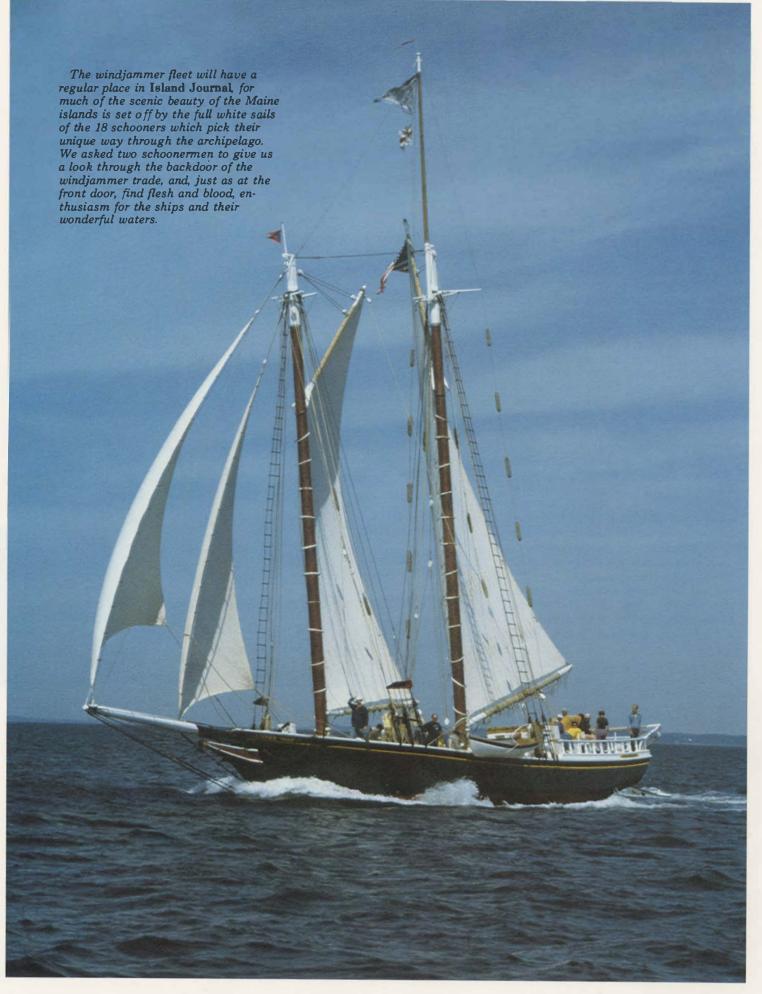
Then there are the Mother Rocks, the ones caught in the sleepy ease of never ending pregnancy, holding rockweeds against their bodies and giving shelter to small animals in each hollow place.

There are rocks that retain no visible life. For me, as a sculptor, these are the most exciting because of what is not yet, back to the time when the first linkages of proteins were to produce 'life'.

My time machine is a pebble on a boulder in a little pool of wet left by the tide. In one two hundred and fiftieth of a second, a billion years flash by at f16.

John M. Garber, a writer and wood sculptor, has owned Sequin Island for over a decade. A large chunk of his lifetime has been spent on and about the Maine islands, most recently rowing through them from the Muscle Ridge to Jonesport.





Schooner Stephen Taber reaching off Camden Harbor

BOATS

WINDJAMMING

JIM SHARP

We think of the Maine islands as a strip of little jewels that run from east to west along the coast. Everyone knows that the islands are beautiful and fascinating, but they are also stout islands; rugged in their ability to survive the sea and salt air and the ravages of the Maine winter.

From the outlook of a Schooner Captain, the islands are a very necessary part of our cruises; a very necessary part of our whole environment. If we're not on an island we're sailing by them, we're anchored off them and they are places that we appreciate and revere.

Schooner captains are lucky in that we don't have to maintain a schedule. In cruising around the islands for the last 20 years, we have found that our boats are able to arrange our lobster bakes so that we can land on different islands most of the time. As a matter of fact, one season we went 11 out of 13 weeks and never touched the same island twice.

We are extremely fortunate in the State of Maine to have islands that are unpopulated and not totally restricted so that people can still use them. One of the sources of my uneasiness is that people come to Maine from out of state, look around and see these gorgeous islands, like those in the Deer Island Thorofare, and decide they must have one. So they buy one knowing that islands will become more valuable as time goes on, and the first thing they do is to post "No Trespassing" signs. Well, the islands have been there for thousands of years. God put them

there and it is aggravating to think that people can legally post them when we have used the islands for years as has everyone else. They are really for all to enjoy. Then the new owners go back to wherever they came from and do not return to the island very frequently, if at all. In the meantime it is posted and no one else can use it.

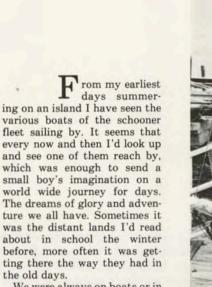
I can understand people feeling protective about a piece of land or island in order to preserve it. However, I think it's too bad that other people can't use at least the beach. At a number of places, there are signs asking that no fires be built above the high water mark which is certainly reasonable.

People are generally fearful of a schooner anchoring off their island and taking hordes of people on them. But I would like to say that islands get better care with schooner people than they would be with a gang of people that are just out for a good time on a weekend with a case of beer. When we go ashore on an island, people wander around; we may pick a few wild-flowers, but for the most part we don't touch anything that is of real ecological significance. In fact, we clean the islands. We pick up all kinds of litter even though it isn't our own. We always make an announcement to that effect and passengers bring back trash from all over the island.

We also pick up wood, blowdowns, dead sticks and so on in order to build a fire so that we can have an island cookout. This helps clean the woods. I think that generally schooner passengers leave an island in better condition than when they went ashore. We naturally want to go back to an island in the future and we don't want to go back to an island that has litter or is over used. So we spread out and use and clean the island and leave it in the kind of condition we would like to find it if we go back again at another date.

I don't mean to dwell on the justification of schooner people using these islands but it is one of our concerns. Of course a major concern as well is the development of the islands. There are places where we can anchor now and go ashore on an island and not see another light or another house in any direction. This is one of the wonderful things about the coast of Maine. To try to keep the islands from becoming overdeveloped without the restrictions imposed by too many laws and regulations is the key. When we start trying to control the numbers of tourists, campers, hikers, and yachtsmen that go ashore on these islands, we're only going to draw ourselves into another bureaucratic mess. To see the islands donated to conservancies such as McGlathery and Wreck off Stonington have been, is certainly heartening. To know they will be preserved and be able to be used is a satisfying thought.

Captain Jim Sharp is one of the most active schoonermen on the coast. The owner of Roseway, and owner and master of Adventure, Captain Sharp's concern for the islands is vital both philosophically and economically. Island care is good business.



We were always on boats or in the water. You don't spend much time on an island before the edge of the land becomes the main attraction. You can't go farther so that's where you go. A boat extended the island. Boats were always natural and easy, they never took any concentration and were fun. Besides the big boats were always there to entice, 4 T wonder what it's like way aloft when you're sailing". You read other people's descriptions but you're never sure what they're talking about. What does it feel like?

I got bigger and went away. For years, it seems I was never in a boat bigger than an outboard. Always in my head was the big schooner sailing out of sight behind the island with her topsail alone showing above the trees. When I left school one of my goals was to sail on a big, traditionally-rigged boat. I had a specific boat in mind, but if it came down to it any one would do.

When I started on the "Adventure" it was with total absorbtion. Of course I lived aboard and that helped, but it was the boat that filled my head. I had thought of her for years and here I finally had a chance to work on board. Just getting aboard was wonderful. Each job was new and interesting, even the ones that are boring and mundane. The spice of the dream took a long time to wear off. We sailed for a movie when I first got there. That was a perfect chance to "learn the ropes". When the spring was finally over and we got to the



SCHOONER EAR peter drury

boat's real business, one week "windjammer" vacations, I was thoroughly familiar with the boat and her parts; now I could see them in action everyday. Get underway, tack, anchor, do it quickly, do it smartly, like sailors in a book.

It is possible to be quicker and more able than others. It's a dying art, a trade developed over centuries, wiped out by some smart guys who figured out how to convert gases of one sort or another into rotary motion, to make ships go into the wind or off the wind at any old speed they want. It's a big thrill to read in a magazine or book about how no one has these skills any more and no one knows the old ways. One article told of lowering topmasts to take an old four master under the Brooklyn Bridge. The author concluded that no one knows how to do that anymore. I had to laugh, we'd done it twice just the week before. The bridge from the mainland to Deer Isle just isn't high enough. I was learning a trade not known by many people.

We'd get under-way Monday morning and be "at sea" for a week. Always anchoring each night, always in and out of the islands. For the passengers from "away" it was a big thrill. All these little islands and a big boat to sail among them. To me it was the life. Knowing the boat and knowing how to do everything in the most efficient way. Enlisting a passenger or two to tail a line here or pull a halyard at the signal. Explaining why, that was half the fun. You always seem to have a few people on each week who are really curious about sailing.

Looking up and seeing an island I'd recognize from years ago added to the summer. It had been six or seven years since I'd been in the area by boat, but it was still the same. I'd look up and see Merchants Row, Swans Island or any of a hundred other places and remember going in to get fuel and having an ice cream or how the restaurant at Frenchboro seemed to be rolling a little, we'd been out so long. There was Harbor Island we'd anchored off of one Fourth of July. We could see the fireworks over Rockland just as if we'd been in that harbor. Things I'd forgotten about came back as the pictures appeared in front of me. It was a hell of a way to spend the summer; I went back the next season.

The winters are hard though. You work 3 or 4 months then most of the crews go away. It's hard to stay in the area and work for just the winter. Sesonal work is great in season; out of season you tend to starve. Three of the schooner owners in Rockland saw this. They had to find something to do themselves. Making all your income for a year in 6 summer months makes for long dull winters.

At the North End Shipyard we found that no matter how we stretched projects there just wasn't enough to do all winter. We'd start on the boats April first and be done by October fifteenth. What to do? Build a new boat! Hire the summer crews as much as possible and let the thing sit partly completed while the sailing season is on. I started towards the end of the second of four winters of construction. Work in the yard and sail; work in the yard and sail. The combination makes it possible to stay on the coast all winter and sail all summer. I work with the same bunch of friends year round. The yard work is old fashioned in a lot of ways, lots of heavy lifting and lugging. It is from a similar age as the boats we sail on, so the labor intensive aspect is not new to any of us. It gives us time to learn more of the old and dying skills. This background allows us to appreciate the old sailing craft we have an opportunity to sail on all summer. We get a full circle of understanding and enjoyment of the old boats.

Somehow this combination of sailing, building and learning the skills that others think are lost has kept me around. There is no place else I could do these things where the boats support themselves.

PETER DRURY

Peter Drury has been mate and crew aboard several of the windjammer vessels, and for several winter seasons on the shipwright staff at Northend Shipyard in Rockland, home of the Isaac Evans, Lewis R. French, Heritage, and Day Spring.



ARCH ISLAND BOATS

The boats of the Maine State Ferry Service are the lifelines of 6 island communities. but nevertheless they remain the subject of endless controversy and ambivalence among islanders, whether year-round or seasonal. Both persuasions can be heard regularly damning and praising the ferry service within a couple of breaths. A fisherman with an outboard motor suddenly on the blink gets left behind by one truck, and audibly complains about the inability of the service to meet the demand of the commercial traffic that sustains it. That same day on the return trip, a seasonal cottager drives off the boat in his stationwagon, towing a boat trailer, followed by his wife in the Datsun, and says to himself, "Ye gods, look at the crowds. Every year it gets worse!"

Anyone concerned with a ferry service becomes trapped in one sort of hypocrisy or another; usually several. But when all is said and done, the finger of history points only one way: toward increased capacity and more service. And because history usually moves faster than public spending, capacity and service inevitably become stressed; and then the finger of blame points to the Maine Department of Transportation. Ferry boats are very expensive to build, and maintain, and there is no rulebook prescribing when, finally, the Department must spring for the money. Whenever it is, it is bound to appear too late in the eyes of the users.

When the present fleet of boats was launched and placed in service decades ago, the changes brought about by the new transport facility was extraordinary, catching everyone by surprise. Indeed, most islanders date "the old days" from "nowadays" to the time the current fleet went into operation. Now that use-levels have caught up with, and surpassed capacity, the Ferry Service again stands at the brink of a new era in island transport — with a new boat, alterations to two existing vessels, and substantial recapitalization of shoreside facilities.

Robert Elder, Director of Port and Marine Transportation Division of the Department of Transportation, says that bids will go out this Fall on the construction of an all-new boat, 166-feet in length and designed by Jack Gilbert of Boston. The new boat will have capacity to carry 30 automobiles on the main deck, and 230 passengers on the upper deck. She will receive 20% of her funds from State sources, and 80% from the Federal government. The ship will spend most of her time on the commuter-filled Islesboro run, trading places with the GOVER-NOR CURTIS on the Vinalhaven route when excessive backup looms there. Meanwhile, the GOVERNOR MUSKIE will be sold since her hull form fits none of the other ferry pier cribs. In the meanwhile, the EVERETT LIBBY, and NORTH HAVEN will be relieved of duty, one at a time, for complete overhaul to be cut in half for 20-foot lengthening operations.

n the capital side, new crew's quarters will be established immediately at Swans Island, with new quarters planned for Vinalhaven and Islesboro in the near future. Matinicus, which enjoys only one ferry trip a month, will receive a new facing on its ferry wharf, and a new schedule of preventative maintainance is soon to be instituted. All the ramps will be refurbished, and a new regimen of bottom painting is being explored. With new substances, the Ferry Service hopes the boats will need to be hauled only once, rather than the former two annual haulings.

The ferry fare formula has also been revised, calling for 45% of the operational expenses to be carried by the users, and 55% by the state. Under this system, Vinalhaven has enjoyed two fare reductions, Frenchboro has weathered one increase, and everyone else remains the same.

For the past two years both passenger and vehicular traffic has increased 5% per year for the ferry service as a whole, some of the individual runs increasing significantly more than that. Clearly it is a compounding phenomena, and the Advisory Board of the Ferry Service, with representatives from Frenchboro, Swans, Islesboro, North Haven, Vinalhaven, and Matinicus plus three mainlanders obviously has its hands full between now and the time the new and revised ships can be brought into service.

BOATS⁽²⁾



The Fox Island Thorofare

Probably no one needs a spy glass to be told that the number of recreational boats is increasing along the Maine coast and islands. Although Acadia National Park on Mount Desert Island and Maine Bureau of Parks and Recreation keep track of how many people visit Maine's national and state island parks. Information on the number of boats anchored off the uninhabited islands where public ferries do not stop is difficut to come by.

For the past 5 years, beginning in 1979, Hurricane Island Outward Bound School has recorded observations of the number of recreational boats anchored off 15 Penobscot Bay islands as part of a Cooperative Research Agreement with the U.S. Forest Service's Backcountry Research Project. A portion of Hurricane Island's outdoor program is a "solo" where students spend 3 days alone on an uninhabited island. Since the students are checked once a day during their solo, the Forest Service has developed a cooperative system of monitoring trends in recreational boat use with solo boat captains recording the number of anchored boats at selected islands during edach solo check. Lobster boats tending traps or boats underway are not counted.

During a solo check a Hurricane Island boat travels an established route through different parts of Penobscot Bay. Depending on how many students are on solo, between 50 and 100 nautical miles are typically covered by the solo boat. The islands from which information was collected include: Big White and Big Garden owned by The Nature Conservancy: Ohio in Hurricane Sound; 3 islands in Sea Bay on the eastern shore of Vinalhaven; Calderwood and Babbidge Islands in the Fox Island Thorofare; two small islands near Eagle Island; Butter Island and two of Barred Islands in northern Penobscot Bay; and Bradbury and Crow Islands further up the Bay.

Over the past 5 years the number of recreational boats recorded during the study increased sharply from a relatively stable period between 1979-1981 to a level nearly twice as great for 1982-1983. However, the visits were concentrated on relatively few islands. The islands most frequently visited are characteristically large, uninhabited islands with several different anchorages which are protected from a variety of wind and sea conditions and which have good landing sites on beaches or gently sloping rock shorelines.

Readers interested in reading the detailed field reports should write to: Island Institute, Recreational Boat Monitoring Project, Box 429, Rockland, Maine.

GETTING THERE — BEING THERE

By Henry W. Taft

A side from islanders themselves, the only people with the means to visit islands are yachtsmen. Of course there are a few islands with public transportation, but I'm talking about the other 2,000 or so which grace the coast of Maine, remote, uninhabited and hard to reach.

What draws the yachtsman to Maine and to the islands? Romance, I'd say. The romantic vision of faraway, unspoiled places; the romance of exploring deserted shores; the feeling of being the first, perhaps, to set foot in this particular spot.

"Nonsense," growls the skipper. "I just want to find a snug harbor with nobody else in it, let the kids fool around in the dinghy, have a couple of drinks at happy hour, maybe a lobster cookout, and fall asleep to the sound of the waves."

But just the process of getting here to Maine tells you something different. The yachtsmen come from Boston and Long Island Sound and Cape Cod. They come from the Chesapeake and Florida and the Caribbean, and anywhere else in the world lapped by salt water. They come from places that are crowded with boats, where it's hard to be alone - places where there's nothing to explore that isn't just like home. They come from noise and pollution, plastic and crime, to a remote and simpler shore whose pace is slow, whose people are close to the sea, and whose islands are beautiful and unspoiled.

It's not an easy trip. From the south, the inland waterway protects you only as far as Delaware, then it's outside along the inhospitable Jersey coast; through the Sound and outside again to the Cape Cod Canal and Massachusetts Bay. Most cruising sailors make an overnight passage across the Gulf of Maine, hitting the coast around Monhegan.

They aren't sea-tourists, these cruising yachtsmen. They get here on their own, sailing a challenging coast, using mostly the power of the wind, willing to deal with the sea in all its moods, the weather and the rocks, in order to experience something out of the ordinary and wonderful.

These are pretty knowledgeable people. Having the money to buy a yacht doesn't guarantee a thing about a man's ability or character, but cruising the coast of Maine does. You must be skilled in navigation, attuned to the weather and the sea. at home among the rocks and ledges. You have to know how to anchor safely in a harbor you've never seen before. You have to be able to deal with emergencies, from bad weather to sickness or injury. You have to be self-reliant, and in that sense yachtsmen are very much like islanders.

Of course there are many kinds of yachts, from gold-platers with captains and hired hands to singlehanded cat-boats, and everything inbetween. And there are all kinds of yachtsmen as well, from groups of friends sailing together to increasing numbers of couples and families.

At one end of the spectrum are the sea-kayakers (endemic on the west coast and probably about to bloom in this part of the world). The kayakers travel light and "in the green" — that is, they need only a few inches of water under the keel and can explore the tiniest coves. It's a startling sight to see one of these little craft sweep in from the sea. At the other end of the spectrum two Excalibers roared over the horizon a couple of years ago — 40 ft. James Bond powerboats complete with mirrored cabins and ladies in gold-lame windbreakers, champagne and twin 500-horse engines. They have padded cockpits with seatbelts, and cruise at 50 knots. The buoys flip past with the sound of telephone poles, sailboats stand still, and it's Friday so this must be Bar Harbor.

But most yachtsmen in these parts are sailors, and the typical boat might be a 35-foot sloop with two couples aboard. What do they want from the islands, what impact do they have, and what can they do for the islands?

Yachtsmen have certain basic needs for the boat: water, diesel and gas, of course, engine repairs and marine hardware. They have to telephone home or the office and arrange to meet crew members coming or leaving. The crew must be carefully nurtured, which means groceries, ice, liquor and other supplies. It also means those much-tobe-desired luxuries known as laundries and showers. And crewmembers need lobsters, or they don't really feel they've been to Maine.

Most of this provisioning is done in the larger harbors. On the islands, yachtsmen need first of all a safe anchorage for the night, and often that's all they ask. Best is a secluded spot with no evidence of the works of man, surrounded by granite and spruce, peopled by cormorants and loons.

Usually it's nice to be able to go ashore and stretch your legs, explore a bit. The boat gets awfully cramped after a few days, and cabin fever sets in. A high point is that lobster cookout on a rocky beach, especially if you bought them from a passing lobsterman instead of in a store.

So far that's not too troubling, and in most anchorages there's little or no evidence that the yachtsman has been there. The trouble comes with numbers. In certain favorite spots, like McGlathery's Island in Merchant Row, years of yachtsmen are beginning to have an adverse effect (windjammers use this anchorage too). Firewood is scarce, little bits of civilization are stuck in the rocks, and toilet paper garnishes the underbrush. Not good.

Another aspect of the

numbers problem is the growing flotillas of various yacht club cruises. Preferring company to solitude, these gregarious vachtsmen race every day from one harbor to the next, and anchor in convivial groups for the evening. Fortunately there is a built-in limiting factor: 2 yachts can anchor in Quiet Cove, but 30 cannot. So the yacht club cruises end up in the larger harbors, and tend to follow more or less the same west-to-east routes from year to year. They spend the night rafted up in Pulpit Harbor or Castine or Northeast. The ultimate goal is to leave 'tit Manan astern and cruise down east to the beach off Roque Island.

It's not that these are careless or thoughtless people. On the contrary, they probably are much more thoughful and caring about the islands than many of us who live here. It's simply the cumulative effect of numbers.

I don't want to exaggerate. We are a world away from the problems of some of the over-cruised areas crowding, noise, oil spills, dirty water, trashing and graffiti. It would be nice to keep it that way.

Do you remember the Virgin Islands when they used to be as remote as the islands of Maine, before the onslaught of the bareboat charter fleets? Will Maine ever be like the Virgins are today? I don't think so. Yes, more and more yachtsmen will be coming here in future years, but certain things are in our favor.

It's a big coast, first of all, and there are thousands of bays and coves and islands. You could take every cruising yacht on the east coast, and (with a bit of organization) anchor each one in its own little cove in Maine, and there would still be lots of room left over. Perhaps more significant, Maine is remote from the population centers, which means it takes a while to get here and back. This element of protection, however, is being eroded by the growth of local charter fleets; yachts

based in Maine have more time to explore the smaller coves and do more north-and southing. Perhaps the best defences are the

rocks and fog; the coast of Maine will always be challenging. This natural screening keeps away the hordes and the U-Drives, and by a process of natural selection attracts those yachtsmen most likely to understand and care for the islands.

Time is on our side - especially if we take advantage of it to raise our collective consciousnesses. There are some simple rules which will help a lot:

- respect the privacy of people who live ashore, and their desire for peace and solitude.

(yachtsmen need to be told more clearly which islands are inhabited, how the owners feel about people coming ashore, and which can be visited without intrusion)

- take out only what you brought: leave only your footprints and some blueberries for tomorrow. (the fundamental wilderness ethic) and some obvious or not-so-ob vious rules of conduct:
- fires only below the high-water mark
- don't disturb seals during pupping season; don't disturb nesting birds.

(good theory, but you have to know when and where seals are pupping, and how close you can get, which birds can and can't tolerate humans close by. That's what some of the consciousnessraising can do for yachtsmen)

In a more general way, our cruising guides and sailing literature can encourage more use of the mainland and river ports, as opposed to the islands. And they can urge yachtsmen away from the more critical areas and towards those anchorages which are less fragile.

We've been talking about ways to avoid damaging the islands. There are positive things as well that yachtsmen can do to preserve the values which attracted them to these islands in the first place. At the top of my list is instilling a proprietary feeling about the islands of Maine. If these are your islands, you aren't going to leave trash. If it's your front yard, you're going to pick up other people's trash. How best to instill that proprietary feeling in vachtsmen I don't know, but I'm sure others will have some ideas.

Even without becoming directly involved, yachtsmen can help by supporting and funding the Audubon Society, Nature Conservancy, Maine Coast Heritage Trust, the Island Institute, and other organizations which make a difference.

All in all, yachtsmen and the islands mix pretty well. Cruising people are generally the kind of folk you'd like to invite over for a drink. The yachts are here just for a short time in the summer, and then they go home. Yachts are mostly selfcontained, and yachtsmen selfreliant. Properly informed and motivated, yachtsmen can probably become one of the strongest forces to support and protect the islands of Maine.

Hank Taft, owner of Good Wooden Boats is writing a new cruising guide to the Maine coast and islands.



NATURE



Puffins on the Rock

PUFFIN REDUX By Philip W. Conkling

The first time you see an Atlantic puffin careen in over the water toward a nesting colony with a bright bill-full of slippery silver herring, you have a strong tendency to flinch at the last moment before it lands. Puffins come in so low and hard with their wings beating furiously against the pull of gravity that they seem to just miss flying directly into an island. But at the last micro-second before touchdown, a pair of bright orange landing gear miraculously appears and they tumble, bounce and scramble into rock crevices to feed their young.

Puffin bodies are a remarkable compromise between the conflicting morphological demands imposed by their ability to fly through *both* air and water. Unlike other diving birds that propel themselves through the water kicking their webbed feet, puffins extend their short powerful wings and actually fly underwater rapidly enough to catch fast-moving schooling fish like herring. If this means they fly to their nesting colonies a little gracelessly, you can certainly understand. After all puffins are both a plane and a submarine packed into a single body, an engineering feat which no one but Howard Hughes ever attempted, and his unhappy air-sea craft, the *Spruce Goose* only flew once.

The aerodynamic compromises with which these 'toy doodlebugs' contend pales beside another compromise of less certain biological origin. Puffins' rounded prim bodies are sharply divided into wholly proper black and whites; but their outrageous red, blue and orange bills completely undermine their otherwise serious demeanor. It's as if nuns or tuxedoed gentlemen were in the habit of setting off their conservative sartorial ensembles with a Halloween assortment of facial rouges. Maybe this is why we like puffins so much: secretly we dream of setting off our serious moments

with a touch of the ludicrous. If we may be excused by our serious scientific colleagues for imputing feelings to these ocean-going birds, even the crinkle in the corners of their eyes seems to suggest that puffins like a good joke.

Back in the days when our predecessors made a habit of serving on their tables "everything that swims the water, flies the air or walks the earth," as one colonist bluntly put it, the unwary habits of the puffin soon led to their almost total disappearance from the Maine archipelago where they are at the extreme southern edge of their North Atlantic range. The recipe for grilled puffin, for instance, called for slitting the carcass down its back, opening it flat like a kipper, and propping it upright in front of a fire to grill. It used to be a relatively simple matter for Maine islanders to capture puffins by spreading herring nets over the rocky burrow entrances on the barren outermost islands where puf-



fins come ashore to breed. It was also considerably cheaper than wasting expensive shot trying to hit this 'doodlebug' careening around at 30 miles an hour.

Sometime in the 1880's puffins disappeared from all but one of the Maine islands where they had nested: a situation which has persisted for almost a century until Dr. Stephen Kress, then a young ornithology instructor with the National Audubon Society at Hog Island in Maine's Muscongus Bay got to thinking. Why, Kress asked himself, if puffins used to nest on 7 Maine islands, couldn't someone figure out a way to induce them to recolonize a former site? From his ornithological background, Kress knew that young puffins have a strong tendency to return to breed on the islands on which they were raised - a behavior ornithologists call 'site tenacity.' So it seemed likely that puffins had not returned to any of their former colonies simply because none had been raised anywhere except the single Maine island on which a small population still survived. So Kress conceived of a project to hand rear puffin chicks at the former colony of Eastern Egg Rock in hopes that the chicks, which look more like something you'd empty out of a vacuum cleaner than their magnificent adult counterparts, would one day return to begin another colony.

The Puffin Project, as the effort came to be known, is surely one of the most likeable research projects ever conceived. But more important, after 10 years of working on this seemingly simple idea, Kress and his crew have produced so many surprising results which hold promise for the future of many different species of birds, that in one sense the project has succeeded beyond anyone's wildest expectations.

W hen Kress began the Puffin Project there were two thorny problems to resolve. First Kress needed to locate a source of puffin chicks from a part of their range in the North Atlantic where they are less threatened than those in the Gulf of Maine. In 1973 with the cooperation of an initially skeptical Canadian Wildlife Service, Kress flew to Great Island in Whitless Bay, Newfoundland where approximately two-thirds of the North Atlantic population of puffins is found. In each of the next 8 years Kress and his volunteers collected approximately 100 eight-day old chicks which they packed in specially designed carrying cases made from 48-ounce juice cans; loaded them onto a waiting boat, then onto a plane at St. John's, Newfoundland, then into a car upon landing in Rockland, Maine, then into another boat to make the 8 mile trip to their new burrows on Eastern Egg Rock. It is quite a marathon for both people and puffins to wake up one morning on an island off Newfoundland and to be tucked in the same night 850 miles away on another island off the Maine coast. In the 8 years of the transplanting program, Kress and his crew successfully raised 96% of the 738 chicks they brought from Great Island, a testament to the care and determination which the Puffin Project seems to evoke in most of those whose lives it touches.

The more intellectually difficult problem which both Kress (not to mention the young puffin transplants) faced was the presence of large nesting populations of herring and black-backed gulls already established on Eastern Egg Rock. Most of our attitudes about gulls are shaped either by an occasional trip to the beach to watch the antics of these birds that are so successfully adapted to life around us, or by the popular life story of Jonathon Livingston Seagull with whom we all partly identify. It comes as a surprise to learn, however, that for a majority of nesting seabirds, gulls present a different face. They are the most serious and voracious predators of the eggs and young of species such as terns, smaller laughing gulls, eiders, petrels and puffins. Of course all these species have had to contend with gull predation from time immemorial; what they have not had to contend with until recently is the inexorable increase in the number of nesting gulls on the Maine coast. As everyone who lives near the coast is often reminded, gulls have learned to feed off what humans leave behind whether it is the gleanings from fishing boats, fish packing plants or the refuse in open burning dumps. From an estimated population of perhaps 9,000 pairs around the turn of the century, gull numbers on the Maine coast has quadrupled. In the process have come to occupy the former breeding colonies of a variety of other less aggressive species.

With the aid of the U.S. Fish and Wildlife Service, Kress initiated a program of reducing gull populations at Eastern Egg Rock. As contradictory as it may seem, without adequate gull control, the Puffin Project was doomed before it started. "To eliminate a living colony to create another," Kress says, "was one of the hardest things about this project. But the system of Eastern Egg was in tune with the availability of food for gulls. They took over the island. Most people think, well, if that's the way it's going, let it go. Who are we to try to stop it? Of course what's happening is that we're creating all these changes ourselves, so we're really left with accepting the kind of natural system that results from effects we have brought about." Simply to let 'nature take her course,' to quote one of the popular expressions of the day, begs the question: which, among the hundreds of courses available, will nature take? If puffins are any measure, it seems certain that the effects of some of our past and present indiscretions will not disappear by themselves; and if we want to retain some of the aesthetic diversity on the Maine islands, it will take some kind of active intervention.

Because puffins do not reach breeding age for five years after leaving a colony like Eastern Egg Rock, Kress and his crew were not expecting any dramatic results between 1973 and 1978. In many ways it was dramatic enough that they had mastered the techniques of hand-rearing puffin chicks by feeding them frozen herring (laced with vitamin supplements) for the 40 days between the time of their arrival and the time when, under the cover of darkness one night, the young puffins would put out to sea to spend the next two to four years. Those puffins that survive the rigors of these first few years at sea, and most will not, begin to appear in the waters around their natal colonies in the early summer, although it will actually be another several years before they select mates, choose burrows and breed.

So the Puffin Project crew watched and waited; not just for a few months, but for 4 to 5 months a year, year in and year out following the departure of the first transplants in 1973. While waiting, the Puffin Project assistants occupied themselves with collecting small bits of information about puffin biology and behavior. To learn more about the daily activities of the chicks in their burrows, for instance, Kress designed a plexiglass top for one of the artificial sod burrows over which he placed a burlap blind and installed a low-watt darkroom light. Among other things the researchers noted about the chicks daily burrow routine was their innate wariness when approaching the burrow entrance to collect the herring left for them by the Puffin Project's kitchen crew. No doubt this wariness is a protective adaptation which reduces their chances of being snatched out of the burrow by a hungry opportunistic gull.

Remembering their own naivety with what to expect in the early going, Kress recalls, "In the first years of the Project we didn't even bother to individually color-band the birds



Puffin Project intern on Matinicus Rock

because we figured they were going to come back here and they'd line up on the shore and we'd see just how many there were. That's where we were with the site tenacity theory. We took it at its bottom line. Now we know that they don't all show up at the same time, which should have been obvious; but not only that, some scatter up and down the coast of Maine."

In fact, to the slight chagrin of Kress and his co-workers, the first puffin transplant to reach breeding age successfully nested not at Eastern Egg Rock, but at Maine's only existing puffin colony on Matinicus Rock 20 miles to the east. The researchers couldn't help wonder if they had gone to all their effort only to see added recruitment in a colony where nesting habitat was already in short supply.

After the appearance and nesting of an Eastern Egg Rock puffin transplant on neighboring Matinicus Rock, Kress decided it would be a good idea to begin tracking the movements of puffins throughout the Gulf of Maine. Slowly in the years after 1977, Kress expanded the Project's observation network to include other potential nesting islands up and down the coast from the station on remote Wooden Ball Island to Machias Seal Island at the entrance to the Bay of Fundy in Canadian waters.

Collectively the Puffin Project assistants have logged tens of thousands of hours observing and recording puffin movements along this 130 mile section of rocky coast. Each night during their vigil, Kress and his crew come up at an appointed hour on their single side band radios to review the day's events and to share stories of which puffins have been seen where, and in the company of which other puffins. Silver-banded 78, for instance is reported one day at Wooden Ball prospecting in a boulder field for a burrow site, and the next day lands at Matinicus Rock where it is reported to be rubbing bills with an unidentified 4 year old puffin. Each evening's roundhouse review of the day's puffin pari-mutuel ends with a lively hand of what has come to be known to Project assistants as 'bird poker.' No one remembers just how it began, and there are no real rules, but the idea is to bet your bird sightings are better than those of assistants stationed on other remote islands. The lively ornithological bidding might go like this:

"I've got a pair of blue-winged teal," from Hog Island base.

"I'll see your teal and raise you a bay-breasted and two blackburnian warblers," crackles the reply from Wooden Ball Island.

"Well, lay down your hands, four flushers, because Matinicus Rock is coming in with, count them, eight dowitchers and an adult gannet."

Even some of the hard-boiled fishermen of the area tune in to catch the by-play.

In the meantime back at Eastern Egg Rock, it occurred to Kress that the highly social puffins might get into the breeding mood only at such places as Matinicus Rock where substantial numbers already gather. So Kress and his crew set out to remedy the situation at Eastern Egg Rock in an ingenious fashion: they set out dozens of carved puffin decoys to lure in prospecting adults. But because wooden decoys are, well, wooden, the researchers added a 3-sided mirror they hoped would provide more social stimulation to some young puffin Narcissus, particularly during mating displays with their all important, multicolored red, orange and blue bills.

Almost immediately the decoy and mirror techniques showed promise as a few prospecting 4 and 5 year old puffins landed among the decovs and began 'billing,' not only with their wooden look-alikes, but more actively with their mirror images. Later Kress would reminisce, "It's well known that birds will land near decoys. Duck hunters and shorebird hunters have known that for years. But I don't know if anybody's ever used decoys for stimulating breeding behavior; although when you think about it, it makes a lot of sense that birds, particularly colonial birds, should be keenly tuned into very specific shapes.'

Partly because the puffin decoys showed initial promise and partly because Kress knew from historical records that most Maine puffin colonies were located on islands that also supported populations of fiercely protective nesting terns, the Eastern Egg Rock crew decided in 1978 to experiment with decoying techniques to attract these birds. Like puffins, the 3 species of terns-Arctics, commons and roseates-have suffered a long decline on the Maine coast throughout most of this century due to the explosion of black-backed and herring gulls which have displaced them on their traditional nesting grounds.

Where tern populations are not swamped by artificially high numbers of gulls, however, they very effectively reduce gull predation on their eggs and young by mobbing any marauding gulls which violate the air space over their colonies in a manner similar to the way flocks of songbirds harass crows or hawks. Though the tern decoys also produced encouraging results at Eastern Egg, it was not until Kress began broadcasting tern courtship songs or vocalizations from loudspeakers in 1980 from dawn to dusk that the terns responded. When the volume was turned down at the end of the season, Kress and his crew were overjoyed to discover that 80 very real pairs of terns had added their voices to the recorded island chorus.

Before the success with the terns, however, one senses from reading the meticulous journals kept by scores of the Project's serious ornithologists and talented amateurs, that they reached a quiet Rubicon sometime in 1979. Looking back, Kress describes those difficult moments, "By 1979 there were no gulls nesting at Eastern Egg, but there were no terns or puffins either. So what had we created? We had succeeded in destroying a population, but we had not succeeded in restoring anything. We were definitely operating on blind faith for awhile.'

Then on the Fourth of July(!) in 1981, after working and waiting for almost a decade, the future arrived for Kress and company, and really for anyone concerned with restoring natural populations to the wild. It must have been a sweet sight indeed when first Evie Weinstein, one of Kress' assistants, and then Kress himself picked up the careening flight pattern of a puffin beating furiously in toward Eastern Egg Rock. But this time Silver Engraved had its bill crammed Number full of herring. "Beautiful herring, Kress would write, tangible proof that hidden away in a rock crevice at the south end of the island for the first time in a hundred years a new generation of puffin chicks had hatched. In fact, when the feathers settled, 5 new puffin chicks had been added to Maine's population; and by 1982, 13 pairs of adults were ferrying herring back and forth to their chicks in the boulder field of Eastern Egg Rock and last year a similar number nested.

Success has followed upon success, as if after 10 years of looking Kress and his crew found a key that has unlocked a door into a room filled with many wonderful surprises. Around the edges of the puffin colony, Eastern Egg Rock now supports 1100 pairs of Arctic, roseate and common terns. Additional recordings of vocalizations of the nocturnal Leach's storm petrel played at the entrances to the unnecessary artificial burrows constructed for the puffin transplants has resulted in a new colony of petrels. Richard Podolsky, one of the most dedicated of Kress' assistants sums up the ways in which the breeding biology of these 5 species are interdependent, "It became apparent that the terns were an integral part of the establishment of a puffin colony in Maine, and the work with the petrels also seemed to fall literally into the old burrows of the puffin transplants." Kress adds, "Hopefully much of what we do at Eastern Egg will generalize to other species. If we can't replicate what we're doing here than what have we really done?"

In fact the interest in extending the Project's techniques to other species has already begun. Podolsky has been invited to Hawaii to experiment with techniques for reestablishing populations of Laysan albatross and Manx Newall shearwaters on the islands where they have been eliminated. Closer to home work has already been adapting these techniques to least terns which have been eliminated from many of their former breeding colonies on sandy beaches of the East Coast.

The Puffin Project's very substantial achievements on the Maine islands may serve as a model for methods to attract other species. The techniques are especially useful to those working with endangered species since the Atlantic puffin in Maine has several significant biological similarities with the biology of endangered species: small population size, high mortality and genetic inbreeding. The experience at Eastern Egg Rock calls into question a cherished ideal that natural systems, if let alone, are fully capable of righting temporary imbalances. Unless we are ready to abandon the notion that natural diversity is aesthetically and intellectually pleasing, we are going to be called upon in the years ahead to devise schemes which undo with our right hand some of the effects that were created with our left.

Philip W. Conkling is Executive Director of the Island Institute, and the author of several books including Islands in Time: A Human and Natural History of the Coastal Islands of Maine, published by Downeast Books of Camden, ME.



PEREGRINE HACKING

R are birds are precious, and few birds of prey are so rare and precious as is the peregrine falcon. Although they are ancient native inhabitants, the past fifty years has seen a catastrophic decline in numbers of peregrines along the entire Atlantic Seaboard. But peregrine falcons are the object of an interesting scientific attempt to revitalize a species; borrowing both from ancient techniques developed over the centuries by falconers, as well as modern field biology methods.

Several places in the Maine Archipelago are known to be former breeding sites of the peregrine falcon, and two of them have been chosen as "hacking" locations on artificial rearing nests for these endangered birds. This fascinating program takes adult birds from several areas world-wide, where their wild populations are still viable, and combines their "genepools" in a regimen of closely monitored adult pairing and egglaying. The eggs are then incubated, hatched, and the broods hand-reared in the laboratory of Professor Jack Barkley, at Cornell University. At the end of 3-4 weeks in the lab, the chicks are transferred to nests in the wild, where for 2-3 weeks they are tended and fed by state and federal wildlife personnel, who have been rigorously trained to the task. At the end of this period the birds are ready for graduation - independent flight and self-care.

The odds of success for an individual bird in the graduation process are not great, but field observation of the species has shown that they are no worse than those for a naturally raised youngster in the wilderness. It appears that quality of habitat, and not the presence of people per se, is the key to brooding success. So, Mt. Desert, at Sommes Sound, and another site on the coast, have been chosen to be hacking locations. The program is unique on several counts: first for its attempt to create a broad genetic background for the new reintroduced populations. Second for its bold program that foregoes much of the inclinations that characterizes many conservation programs, which generally take a hands-off approach to natural systems. Finally, the program is not secret. The scientists who are involved seek public understanding, and are placing at least some of the nests where, from afar with binoculars to be sure, the public can watch the proceedings, and share in the excitement and hope.

In 1983 4.3. million (!) people visited Acadia National Park on Mount Desert. Yet, the habitat there remains good for peregrines, for they do not seem to be disturbed by human presence and traffic. So there is adventure here for everyone who love birds, especially the raptors - the birds of prey. The peregrine falcon was the "Bird of Kings" for millenia, prized for its character and ability in hunting from the arms of princes, nobles and samurai in the field. To this day they have a price on their head in the Arab world. On the islands of Maine we have no princes (though there may be a princess or two), but we are taking a crack at having resident falcons again since not all of our hackers here in the islands are computer buffs.

THE PEREGRINE FALCON FLYWAY

For a month and a half this fall 6 Island Institute interns with teams of Earthwatch volunteers will collaborate on a research project to help determine the significance of Maine's outer islands to migrating peregrine falcons.

Until a few years ago, ornithologists had little idea that the outer islands of Maine may be important feeding areas for Arctic peregrines migrating south. But then no one had really looked. In late September and early October the windblown, outer treeless islands are usually deserted of bird watchers.

However, last year Steven Baird working on his senior project under Professor William Drury at College of the Atlantic spent a month on one of Maine's most isolated outer islands and counted an astonishing number of peregrines.

With a network of skilled interns and teams of research volunteers this September and October the Island Institute will have enough observers in the field to produce comprehensive baseline data on the number of peregrine falcons using these remote islands as feeding stations before they make their next major landfall - Cape May, New Jersey. (See the description under Educational Programs of the Island Institute if you know someone who might be interested in participating.).

EAGLE SCOUTING

M aine islands have been a haven for the endangered bald eagle, our national symbol. Fully a third of the 74 pairs of eagles censused in Maine during 1983 nested on coastal islands. While diminished numbers of new eaglets threatened the future of the species in New England, eagles nesting on Maine islands produced more than 50% of all eaglets raised in the northeastern United States during the last 20 years.

There are no appraisals of their former abundance, but bald eagles were a common sight prior to the colonial era. Islands and other landmarks named "Eagle" or "Swan" (from the Abenaki Indian word "Sowangan", meaning "eagle") strongly suggest the former wide distribution of nesting eagles. Early explorers of the Maine coast such as Rosier (1605), Captain John Smith (1614), and Josselyn (1672) recorded exceptional numbers of eagles in their journals. Josselyn noted that gripes" (eagles) were so abundant in Casco Bay that residents shot them to feed their hogs.

Maine eagles have since suffered at the hands of man from shooting and changes in their natural habitat. The town of Vinalhaven adopted a 20¢ bounty on eagles in 1806. Herbert Spinney noted the decline of eagles nesting in the midcoast area because of lumbering in the late 1800's. Large pines near the coast, favored as nest trees by eagles, were among the first to be cut and exported for ships' masts. Some islands were cleared entirely. Habitat alterations in the form of island home or camp construction have continued to cause abandonment of eagle nests, but there are a few encouraging instances where eagles tolerate human neighbors.

The most serious threat to Maine eagles surfaced after World War II. Contamination of the environment by DDE (a by-product of the insecticide DDT) and similar chemicals such as PCB's caused widespread nesting failure. Despite their ban, these contaminants persist and are frequently still present at harmful levels in eagle eggs. Nesting success and the overall rate of eaglet production in Maine have increased bit by bit within the last 5 years but are still below normal levels.

Eagles no longer nest west of the Kennebec River in Maine or elsewhere in New England. Nearly two-thirds of Maine's current eagle population resides Downeast, primarily in Washington County. The limited human presence along the eastern coast is obviously favored by these reticent birds. Eagles are extremely loyal to traditional breeding areas where human influences have not substantially altered their habitat. Eagle nests have been known for more than 200 years on Swan Island (Richmond), over 100 years on Roque Island (Jonesport), and over 60 years on the Porcupine Islands (Gouldsboro).

Food is obviously the ultimate factor influencing eagle distribution. The year-round availability of food along the Maine coast enables continued residence by adult eagles which frequently maintain ties to their nest even in midwinter. The movements and habits of immature eagles are quite variable, although they often aggregate near abundant foods. Current research with largescale winter feeding stations has attracted concentrations of 10-50 immatures at several coastal locations. (Immature eagles are full-grown but their plumage is brown with white mottling and lacks the white head and white tail attained at adulthood when 4 years old).

Fish-eaters throughout most of their range, bald eagles enjoy a varied menu in coastal Maine. Eagles usually fish in inshore waters capitalizing on the relative ease of capturing seasonally abundant migrating alewives and eels or sculpins and other bottom-dwelling fish standed in shallow tidal pools. They may also steal prey from other birds especially the osprey, a more adept fisherman. Eagles nesting near island seabird colonies regularly eat gulls, cormorants, and eiders. Various waterfowl species are included in the eagle's winter diet. Eagles also scavenge mammal carcasses such as deal sheep and seals. Eating carrion and piracy were deemed less noble traits by Benjamin Franklin who cast his vote for the wild turkey rather than the bald eagle as our national symbol in 1782.

Preferred nest locations are near the shoreline enabling adult eagles to guard their nests while watching for food. Nests are also typically situated in remote settings reflecting the desire of eagles to avoid disturbance from regular human activity. Finding a suitable nest tree completes the process of nest site selection. Eagles choose old-growth trees likely to have sturdy limbs for nest support, an open crown for situating the nest below a sheltering canopy of live foliage, and superior height which promotes good visibility and easy access for the large birds. An "average" eagle nest is 4 feet wide and 3 feet deep, weighing 1,000 pounds. Nests are enlarged each year with additional sticks and may persist for as long as 40 years mandating a durable tree. A nest on Little Swan Island near Richmond

Douglas, Alword

was estimated to be 20 feet from top to bottom and 4,000 pounds in weight.

Eastern white pines, our state tree, are preferred nest trees of eagles in Maine but are frequently lacking on the islands. Thus eagles nesting on the islands often build in the open tops of damaged spruce trees, quite similar to the common appearance of an osprey nest. In fact, there are several instances of nest interchange between these species. A more unusual interaction is use by eagles of 3 great blue heron nests, another fish-eating bird nesting in treetops.

The isolation of an island affords a degree of protection from human disturbance not easy to attain on the mainland. Thus islands are preferred sites for protection by state and private conservation organizations. Many island nests are easily seen from the water, but eagles generally exhibit more tolerance for nearby boats than activities on land. It is best to resist the urge to closely approach a nest, as repeated visitations may cause the adults to abandon their nest. The critical nesting period when eagles are sensitive to disturbance begins with courtship in March and lasts through the time when eaglets are accomplished fliers in August.

Islands are such ideal management units that artificial nests were constructed at 2 former nest locations in order to attract eagles to protected sites. Eagles successfully raised an eaglet at one of these "nests" in 1983. The Nature Conservancy and the Maine Coast Heritage Trust have both contributed to eagle protection by acquisition or conservation easements on several Maine islands. Voluntary agreements to restrict land uses near eagle nests have been formalized between landowners and the Maine Department of Inland Fisheries and Wildlife at 70% of the nests in Maine. This overwhelming response is strong reassurance of the general concern for the plight of the bald eagle and the special resources which are reflected by the presence of these majestic birds.

By Charles S. Todd and Mark A. McCollough, researchers with the Cooperative Wildlife Research Unit, University of Maine at Orono. Charlie and Mark are working under the supervision of Ray ("Bucky") Owen, Jr., Chairman of the Wildlife Department.

t. Desert Rock is a real L island. There is nothing extraneous or frivolous about 4 acres of bare granite that form the most remote of Maine islands. Located 24 miles south of Mt. Desert Island and directly in the middle of the Gulf of Maine's offshore shipping lane, the Rock has been the site of a lighthouse station for almost two centuries. Once manned throughout the year by lighthouse keepers and their families, this lonely station has a history of frequent shipwrecks and tense rescues. Today the light is automated and those of us that live there perform very different tasks from those of lighthouse keepers of the past. . .We watch for whales.

The Mt. Desert Rock Whale Watch began in 1973 when the Coast Guard invited the entire student body of the College of the Atlantic, then numbering some 30 people, aboard their boat for a trip to the Rock. Whales were probably not uppermost in anyone's mind upon leaving Southwest Harbor for the two hour trip past the Duck Islands and across the 11 miles of open water to the Rock. But the number of whales that day startled everyone and the idea of a field station was born. the station was opened that summer by Dr. Steven Katona, who directs the cetacean research program called Allied Whale and Scott Kraus, who was then a student. From dawn until dark a watch was kept from the lighthouse tower. Whales were located, identified, and observed for behavioral information and 11 years later, this is still the design of the program.

The Rock is uniquely positioned in the Gulf of Maine. It is one of only a handful of places along the coast where whales can be seen from land undisturbed by boat pursuit. The island is in the center of a rich marine environment that has traditionally been a fishing ground for lobstermen, gill netters, and herring seiners. A remnant of the ice-age, the Rock is surrounded by both shoal and deep water currents. Where the current collides, zones of upwelling create prime habitat for zoo-plankton, fish, squid, and for the marine mammals that feed on them.

Coming to the surface only to breathe and occasionally to make spectacular leaps, whales defy us to answer even the simplest of questions about them. Initially the goal of the Whale Watch was to find out what species of cetaceans live in the Gulf and to make estimates of their abundance. The first question is more easily answered than the second. During the 11 years of the program, we have seen the four large baleen whales: finbacks, humpbacks, right whales and minkes, and the four smaller toothed whales: pilot or pothead whales, white-sided and white-beaked dolphins, and harbor porpoises. Estimates of abundance however, must rely on minimum daily counts called 'sightings' and while these do not represent accurate population numbers, the fluctuations of these sightings through the years have been very interesting. Finback whales, for example, were common in the early years of the program, but in 1978 they dropped from a yearly high of 168 (1975) to 16. We suspect that the cause was due in part to the herring fishery which also declined at that time. It seemed reasonable that finbacks, which are highly mobile animals, went elsewhere to feed. This theory was substantiated in 1983 when both finbacks and herring seiners returned to the Rock. This kind of data gave us a good picture of the interactions of whales with their food species in the Mt. Desert Rock region.

Whale research in general has grown enormously in scope since the Whale Watch was first started and many of these changes have been reflected in our program. Boat interaction and possible disturbance has become an important issue with the onset of a booming whale-watching business. In the comparatively unfrequented waters surrounding the Rock we have been able to compare the respiration and behavior patterns of whales in close proximity to research and fishing vessels with those of whales on their own. The results are far from clear-cut; a whale which tolerates the pursuit of a boat in the morning may suddenly evade it in the afternoon. Individual identification of particular whales by photographs of their natural markings has become another area of considerable interest. Such a technique relies on prominant scars or in the case of the humpback, on the vivid black and white tail pigments that are unique to each animal. Allied Whale acts as a clearinghouse for thousands of these pictures contributed by whale researchers, yacht owners, and fishermen. From Newfoundland to Dueno Rico individual identification opens up entire new worlds in cetacean research and makes it possible for us to track particular humpbacks day by day at the Rock or year by year as they make their migration southward to the Caribbean to breed and back again to their northern feeding grounds.

When the sun goes down and the fog rolls in, most whale watchers call it a day and go to bed but the world of Mt. Desert Rock has other things to offer besides whales. On nights in June or July, fine-mesh mist nets are set and tape recorded calls are started. Soon we are catching and banding a tiny sea bird called a Leach's storm petrel. Leach's petrels nest throughout the Gulf in burrows dug on offshore islands and the three and four year olds are irresistibly attracted to the Rock at night despite the fact that the island has no colony of nesting birds. Mt. Desert Rock is a wonderful place to see the whole range of pelagic or open ocean seabirds and thousands of shearwaters, fulmars, terns, and phalaropes use it as a staging area each year. Bird banding has become a full-time occupation in the daylight hours as well when hawks, shorebirds, and passerine migrants use the island as a stopping-off point on their long journeys southward. Since 1979 we have banded two hundred species of land birds and learned a great deal about offshore migration.

Mt. Desert Rock is a very lonely spot and its thick fog and rough surfs may not be everyone's idea of a vacation place. But each year between 30 and 40 volunteer whalewatchers come to provide us with their invaluable assistance; to stand the long, cold watches in the lighthouse tower; to learn about research techniques; and to share the magic of the island. To these people and to us, the living laboratory which the Rock offers has no comparison.

by Ann Rivers and Steven Mullane

Ann Rivers and Steve Mullane have been running Allied Whale's Mount Desert Rock Station since 1979. Anyone interested in joining the volunteer program should get in touch with Ann Rivers, Allied Whale, College of the Atlantic, Bar Harbor, ME. 04609.

FELLOW COMPETITION

H arbor seals are found in all northern oceans, but along our edge of the North Atlantic, Maine half-tide ledges are near the southern limit of where they breed and pup. Harbor seal populations reached their lowest ebb during the early part of this century when seal bounties were most aggressively pursued. Since 1972, however, harbor seals have been the prime beneficiary in Maine of the Marine Mammal Protection Act which made it a federal crime to take, harass or kill any marine mammal in the United States territorial waters.

With protection, the harbor seal population in New England has increased to approximately 12,000 to 15,000 seals in the latest count conducted in 1981. Herein lies the ingredients for a growing controversy. Resident seal watchers who think of the seal as a critical aesthetic element of the coastal community are only too pleased with the increase. Seals are a visible natural attraction for tens of thousands of coastal visitors who are attracted to the Maine coast in part for the diversity of wildlife within easy viewing during the summer. But to many of Maine's fishermen, who share the shoreline and fish resources with the seals, the increase in seal numbers generates concern.

In other regions of North America, increasing seal populations have collided head-on with expanding and intensified inshore Harbor seal on a half-tide ledge



fishing pressure. Although harbor seals are opportunistic feeders whose diet includes all kinds of fish. squid, and crabs; some fishermen fear that competition with seals for commercially valuable fish species will inevitably increase. Seals often fish the same waters as commercial fishermen and may come in direct contact with nets and traps, resulting in damage to the fishing gear, losses of trapped fish, and the entanglement of feeding seals. In a spectacular confrontation this spring in Eastport seals ate close to \$500,000 worth of Atlantic salmon which had been freed from their aquaculture cages during an April northeaster.

Recognizing the potential for increasing conflicts of this nature, the National Marine Fisheries Service has provided funding to the University of Maine at Orono since 1981 to study the harbor seal population and its interactions with commercial fisheries in New England. The primary objectives of this study has been to assess harbor seals' abundance, distribution, movements, and habitat requirements in New England. The task has been accomplished by integrating coastwide aerial surveys, coordinating a network of volunteer seal counters, and tagging and tracking the movements of individual seals. Other research, directed at quantifying the biological and economic losses resulting from marine mammal interactions with commercial

fisheries, has involved telephones, dockside, and at-sea interviews with fishermen. The development of this program demonstrates the cooperative effort being made by researchers, fishermen, and government agencies in managing Maine's seal population.

The U.M.O. seal tagging program has provided information on the movements of individuals in this population. To date, more than 60 seals have been caught and tagged with individually numbered flipper tags; 6 have also been equipped with radio-transmitters. Seals tagged in this program have been observed later on Mt. Desert Rock, Seal Island near Matinicus, Cape Cod, and throughout Penobscot and Blue Hill Bays, where they were originally tagged. Sightings of this nature, reported by island residents, fishermen, and other researchers have been essential in developing our knowledge of seal movements.

There are many cases of fish and gear damage that are undeniably caused by seals but most cases are localized and apparently caused by a few "problem" seals. Although it is difficult to estimate the seals' impact on fish stocks, it is unlikely that they could reduce a stock significantly because they are opportunistic feeders, eating fish that are most valuable and abundant. When one prey item is scarce, they switch to another species, with the same flexibility of many coastal fishermen.

In Maine, as elsewhere, seals are occasionally and accidentally entangled in fishing gear. No fisherman wants to catch seals in their gear, but because seals and fishermen are in the same area and often after the same fish, it inevitably occurs. The provisions of the Marine Mammal Protection Act recognize this inevitability and also recognize that non-endangered marine mammal populations can withstand a certain amount of removal without jeopardizing the population's reproductive capabilities. Thus, the Act allows carefully regulated removals (by permit) of marine mammals in the form of subsistence harvests by native Americans, unintentional harvest or injury in commercial fishing operations, as well as collection for display and research purposes.

Harbor seals give birth from May to mid-June on ledges sheltered from weather and human disturbance; many ledges have been active nursery sites for decades. Although pups are able to swim at birth, they may be unable to keep up with their mothers if disturbed off the ledges. It is important to minimize disturbance at these sites while pups are present and to recognize that lone pups have not necessarily been abandoned permanently, and should, therefore be left untouched where they are.

For centuries, seals and humans have coexisted as predators within Maine's coastal and marine communities. Increasing populations of both predators will continue to generate complex biological, political, and economic conflicts. History has shown that we can share the coast with seals. With realistic and comprehensive resource management, we will be able to continue to do so for centuries to come.

If you would like to aid U.M.O.'s harbor seal research program, there is a constant need for volunteers to count seals and report tagged seal sightings. Although year-round observation at a given site is preferred, any assistance is welcome. For more information on the Biweekly Volunteer Observer Network, please contact Kate M. Wynne at: 240 Nutting Hall, U.M.O., Orono, ME. 04469, (207) 581-2907.

Kate M. Wynne

LIGHTS

Editor's Note:

It is a hard person who has no soft place in his or her heart for lighthouses. Their physical presence speak of absolute service to mankind, and their symbolic power — their light in the dark, towering over the most absolute wilderness, is recognized and used by thousands as a sign of whatever truths they speak. And no wonder; the lives saved and property protected can never be known. How many billions of glances at their speck of light on the horizon have given reassurance, or corrected a course? We are giving lighthouses the last work in this pilot issue of Island Journal. There are so many stories to tell, to be told. We think it best to get to it, inviting all readers with lighthouse experiences to share them with the readership. Here Stephen Perrin gives us a roundup of the Maine lighthouse situation and policy, and Delia Mae Ferris writes with some of the most moving prose imaginable of her family's years of growing up in the light stations. Please join us in keeping the remaining Maine stations intact, installing in them citizens, programs and activities that will continue to express the diversity and strength of character which they so naturally nurture.

LIGHTS LOST

The Automation of Maine's Island Light Stations

By Stephen G. Perrin

A merica's first lighthouse was an island light which was built at the entrance to Boston Harbor in 1716. Maine's first island light was erected on Seguin Island off the Kennebec River in 1795. By 1840 there were 23 attended light stations on the islands of Maine. By 1858 there were 36 and in 1900 there were 54. Only after the turn of the century, three more were established.

Today there are 8. The rest have been automated or discontinued. The unmanning of Maine's island lights is now almost complete, and a new, depersonalized era in the history of America's lighthouses has begun. The lights may be shining still, but the abandoned keepers' dwellings are passing rapidly into the shadows.

The era of automation began when 13 Maine island light stations were unmanned during the 1930s by the Bureau of Lighthouses, primarily to cut costs in response to the Great Depression. Many of these stations were sold to families as vacation homes; as a group they offer the best preserved examples of a unique Downeast style of lighthouse construction.

The Coast Guard, responsible for lighthouse operations since 1939, has unmanned 35 more Maine island lights during the last 4 decades. The vigilance of a human keeper no longer needed, the signals have been automated or replaced, the stations unmanned, and the dwellings vacated. With only occasional inspection and maintenance visits after that, the highly exposed structures have been subject to deterioration, storm damage, and vandalism. The Coast Guard has become acutely aware of its lighthouse problem.



Ram Island Light

Ideally, it holds that each lighthouse shall "present a proud appearance to the public." But it also admits, "there is widespread and increasing concern about the deteriorated conditions of many automated and unmanned lighthouses."

Most vulnerable of all are the empty keepers' dwellings. They have lost their central position in the orderly scheme of things and are now superfluous. Occasionally they have been "reinhabited" as billets for military caretakers or have been occupied by nonprofit groups licensed by the Coast Guard to maintain them at their own expense. More commonly they have been "site hardened," a Coast Guard term for being stripped and sealed against wind and weather until a more permanent fate can be determined. In many cases, the dwellings have simply been demolished.

Although acetylene gas and electricity had been used to automate some smaller lights, earlier in the century, the invention of the transistor after World War II led to the development of electronic devices capable of controlling even the largest offshore lights. Saddleback Ledge, famed for its difficult landing from a swinging bosun's chair, was automated in 1954. Six more stations were unmanned in rapid succession as the pace of automation picked up at the end of the 50s. Then, one after another, in the 20 years between 1963 and 1983, 28 additional Maine island light stations were automated and unmanned, leaving only 8 of the original 56 still attended. Manana Island Fog-Signal Station was not affected by this trend: it stands today as the only manned fog-signal station on America's coast.

Several motives pressed the Coast Guard to undertake a rapid depopulation of its island light stations. One was to cut the risk of moving crews on and off a light during heavy seas or poor visibility. Also isolated and restricted duty apparently lowered the morale of Coast Guard personnel. Then there were fiscal concerns. Manning, supplying, and maintaining an offshore light station are all expensive budget items for a military service that has many other missions aside from providing signals to mariners. If automation could provide reliable service, then unmanning seemed to be an obvious way of offering that service at the lowest cost to the taxpayer.

After its original rush into automation the Coast Guard set up a Lighthouse Automation and Modernization Program (LAMP) in 1968 to oversee the funding and scheduling of further automation projects. In the 1970s the hardware was standardized to simplify installation and maintenance procedures and to reduce the cost of training technicians to perform them. The crucial navigational signals remain, but these island outposts are reverting to the natural conditions that ruled them before the era of lighthouse construction began.

Demolition

More than a quarter of the keepers' dwellings at Maine island lights have been destroyed. Current guidelines state: "Structures not needed after automation should be scheduled for demolition if they are not designated as historic." That sentence does not adequately sug-



Two Bush Island Light

gest the complexities involved in complying with the provisions of the National Historic Preservation Act or the National Environmental Policy Act. The simple fact is that dwellings at the following island stations have been demolished: Avery Rock off Machias, Boon Island off York Beach, Deer Island Thorofare off Stonington, Eagle Island off North Haven, Franklin Island off Pemaquid, Libby Island off Machias, Moose Peak off Jonesport, Nash Island off Cape Split, Pond Island at the mouth of the Kennebec, Saint Croix River, The Cuckolds off Boothbay, and Two Bush Island off Sprucehead. In addition the dwellings in several other caisson and tower lights no longer exist, including those at Whaleback off Kittery, Goose Rocks in the Thorofare between North Haven and Vinalhaven, and Spring Point Ledge in Portland Harbor.

In 1979 a Coast Guard board of survey recommended razing one of the two dwellings at Whitehead Island and it seems certain that several others will be demolished at other stations where noise pollution from fog signals makes the dwellings uninhabitable. In these cases "unmanning" is a gentle euphemism for the demolition process.

The demolition of lighthouse dwellings has been accomplished in various ways. The Cuckolds and Boon Island dwellings were damaged by the February gale of 1978; the Coast Guard only finished the job that nature had begun. The Saint Croix River Light was destroyed by fire in 1977. Built on Dochet (formerly Demont's) Island where the Sieur de Monts established a colony in 1604, the light was framed into the roof of the keeper's dwelling in 1857.



Pond Island

After unmanning , it was broken into by two 14-year-old boys who set it ablaze.

The dwellings at Two Bush Island in the Muscle Ridge Channel and Moose Peak Light on Mistake Island suffered even more violent fates. The apparent absence of historical value, isolation, and high maintenance costs all entered into the Coast Guard's decision to raze them. At Two Bush Island wrecking bids were sought in 1969, but all offers exceeded the Coast Guard budget so a military solution was adopted.

The 10th Special Forces Group at Fort Devens, Massachusetts, is in the demolition business. It conducted a joint training exercise with the Coast Guard at Two Bush Island in the early 70s. All went according to plan, except the Special Forces' blast cracked the brick walls of the adjacent tower and broke panes of glass in the lighthouse lantern. The U.S. Fish and Wildlife Service is now arranging to take Two Bush Island over as a wildlife refuge.

On October 12th, 1982, the dwelling at Moose Peak Light Station off Jonesport was deleted from the Coast Guard property list in much the same way. About midnight a Coast Guard cutter carried 21 men from the 10th Special Forces Group out to the vicinity of Mistake Island off Jonesport. Towing 500 pounds of TNT and some composition explosive in a rubber raft, an assault team swam to the landing site around 0500 and "infiltrated" the vandalized dwelling. The exercise then went into an "administrative mode" and classes were held in the art of demolition. The charges had

been placed so that the walls would implode into the building, but as it turned out timbers flew outward, breaking panes in the lighthouse lantern and damaging the helicopter pad.

The Cuckolds

At one time there had been another option for the Moose Peak dwelling. A resident on a nearby island had shown interest in acquiring it for private use, but the cost of installing a sewage system that would meet EPA standards proved prohibitive and plans for demolition were resumed. Now that things have been cleaned up The Nature Conservancy is seeking title to the property. Mistake Island provides a suitable habitat for four of Maine's rarest coastal plants (Beach-head Iris, Bird's-eye Primrose, Marsh Felwort, and Roseroot Stonecrop) and is one of only three sites where all four can be found growing together, as they do on either side of the walkway between the ruins of the keeper's dwelling and the tower at Moose Peak Light.

Surviving Dwellings

One exception to this tale of devastation is given by the dwelling attached to Bass Harbor Head Light on Mount Desert Island. Although no longer housing a keeper, it has been refurbished as quarters for Coast Guard personnel stationed at Southwest Harbor. The fog bell is gone and the light has been automated, but the dwelling is still a home and is cared for and maintained on a daily basis. To be eligible for such treatment, a dwelling must be located near a Coast Guard installation and be accessible by road. These dual requirements rule out most other island lighthouse dwellings.





Egg Rock

Moose Peak Light

Island light stations sold to the public before World War II were located for the most part on inshore islands easily accessible by small boat. They were acquired primarily as seasonal homes and the task of keeping them supplied and maintained has imposed no undue hardship on the new owners. The remoteness of these dwellings is slight when compared to the isolation imposed at Saddleback Ledge, Matinicus Rock, or Great Duck Island.

Another group of light stations that have managed to survive the throes of unmanning are those dwellings converted to public use. The lightkeeper's house at Grindel Point Light on Islesboro is now a Sailors' Memorial Museum commemorating the mariners who sailed out of Gilkey Harbor. Monhegan Island Light Station was bought in 1962 by Monhegan Associates, a local land trust, and put to use as an island museum. Perkins Island Light in the Kennebec River was transferred to the State of Maine in 1964 as a historic monument. Although that plan hasn't worked out, the dwelling still stands after its rather checkered career. The lightkeeper's house on Curtis Island at the entrance to Camden Harbor was acquired in 1973 by the Town of Camden with six acres of land to be used as a public park.

Baker Island Light Station was transferred in 1958 as an addition to Acadia National Park. The dwelling, which offers a unique prospect upon the Bar Harbor Hills, has not been used and stands as a classic example of a boarded-up house. Bear Island Light Station at the entrance to busy Northeast Harbor was discontinued in 1981. It seems to be in an ideal location for incorporation into Acadia National Park; but the station occupies only a fourth of the island and some local residents have voiced opposition to its public uses, so the National Park Service has declared a lack of interest in its acquisition. It may be sold by competitive bids through the General Services Administration (GSA).

Several lighthouse properties have been transferred to the U.S. Fish and Wildlife Serviced as colonial bird nesting habitats. Both Nash Island and Petit Manan Island, off Cape Split and Milbridge respectively, are now included in Petit Manan National Wildlife Refuge. Gulls, terns, and eiders now nest in dense colonies where light keepers' families once planted flowers. In fact some of these seabirds nest in the unused outbuildings and keeper's dwelling at Petit Manan Light. As one Coast Guardsman says, "You can't keep the birds out. Fish and Wildlife has got to do something in a hurry because those places are going right to pieces. They're a terrible eyesore making the light look bad; the whole area look bad.

For the rest, the dwellings are boarded up. A few are lived in on a seasonal basis, but most are empty year-round. The list of abandoned dwellings includes: Baker and Bear Islands off Mount Desert Island, Burnt Coat Harbor on Swans Island, Egg Rock in Frenchman Bay, Heron Neck off Vinalhaven, Little River off Cutler, Matinicus Rock in Outer penobscot Bay, Mount Desert Rock in the Gulf of Maine, Petit Manan off Milbridge, Ram Island off Boothbay Harbor, Squirrel Point on the Kennebec River, and Whitehead in Muscle Ridge Channel.

Only two of these dwellings are at lights where there is no fog signals: Baker Island and Burnt Coat Harbor. The presence of fog signals is significant because the Environmental Protection Agency (EPA) requires the Coast Guard to restrict public exposure to sound pressure levels higher than 60 decibels. Typical ratings for new pure-tone (electronic) fog signals fall in the range of 123-147 decibels. Ten feet behind such a horn the sound pressure level can be as high as 120 decibels. The zone of potential hearing damage may extend more than 750 feet back of the horn. In front it extends several times that distance. The danger arises not so much from the volume of sound as from its purity, since it is concentrated on a single frequency. These fog signals are capable of causing permanent hearing loss without inflicting any sense of pain. The Coast Guard is required to "inhibit habitation" of any lightkeeper's dwelling in the vicinity of such a signal.

Public Use

The Coast Guard is also committed to the preservation of dwellings at historically significant light stations. In spite of its obligation to keep people out of sound polluted dwellings, it encourages licensing the use and upkeep of its National Register properties to groups with sufficient stature to be able to protect them. The purpose of this policy is to reduce federal expenditures and deter vandalism at historic sites under Coast Guard jurisdiction.

Two examples of this are the licensed occupation of facilities on

Mount Desert Rock by Allied Whale, a research project directed by Steven Katona at College of the Atlantic, and the use of Matinicus Rock as a field station administered by Stephen Kress of National Audubon Society. By these agreements the Coast Guard gets help in maintaining historic buildings on two of Maine's outermost islands and the researchers get facilities for carrying out their projects.

The automation of Matinicus Rock Light in 1983, the Coast Guard's most recent LAMP project at a Maine island light station, has prospects of becoming-from the public's point of view - its most successful. The automation of Matinicus Rock Light required more than \$500,000 worth of equipment and 7,500 man-hours to install it. A primary seacoast light since 1827, it was unmanned on December 15, 1983, after 155 years of attended operation. Coordinated by Lt. Kent Mack of the First District Civil Engineering Branch, the automation of Matinicus Rock will be complete after construction of a shelter for stranded mariners, repairs to the granite dwelling and tower, and the signing of a license agreement with National Audubon Society in 1984 for seasonal use of the dwelling for its Puffin Project. One of the terms of that license is a waiver of Coast Guard responsibility for any hearing loss or discomfort that Audubon biologists might suffer due to longterm exposure to pure-tone fog signals.

In addition to licensing the use of the dwelling by Audubon's Puffin Project, another result of the automation of Matinicus Rock Light was the transfer of the old lens and fog bell to the Shore Village Museum in Rockland in accordance with instructions for the disposition of Coast Guard artifacts: "It is considered a violation of the public trust when Coast Guard artifacts are not properly displayed and/or safeguarded." By helping the Coast Guard carry out this policy, Ken Black, Director of Shore Village Museum, has assembled a fine array of Fresnel lenses, fog signals, and lighthouse other historic memorabilia. This collection gives at least a hint of the richness of the tradition for which the Coast Guard serves as the current guardian.

Though not protected by a license agreement with the Coast Guard, the dwelling at Curtis Island Light in Camden Harbor survives by a somewhat similar arrangement. The town acquired the island in 1973 for use as a public park. The house is occupied three months of the year by a volunteer caretaker who maintains it in good order as both a summer home and as an integral part of a National Register property. Again, it's a three-way win shared by the town, the caretaker, and the historic property.

Historic Value

Federal agencies are required by executive order to locate, inventory, and nominate properties under their jurisdiction or control to the National Register of Historic Places. At the present time only 8 Maine island lighthouses are listed on the National Register, 5 of them unmanned (Monhegan Island, Curtis Island, Libby island, Portland Breakwater, Rockland Breakwater) and three of them manned (Browns Head, Burnt Island, Seguin). Three others have been specifically excluded from the Register (Ram Island, Little River, Bear Island). Seven unmanned island lighthouses are eligible for nomination to the Register. Twenty-five others (5 manned, 20 unmanned) have not been inventoried to determine whether or not they meet the criteria for nomination.

The criteria for selecting National Register properties stress the importance of an existing "integrity of location, design, setting, materials, workmanship, feeling, and association" that resides in a site or structure having historical, architectural, archeological, cultural, or engineering significance. In addition, such sites and structures should either be "associated with events that have made a significant contribution to the broad patterns of our history" or "represent a significant and distinquishable entity whose components may lack individual distinction." Almost any lighthouse keeper's dwelling partakes of the integrity of the station of which it forms a vital part. Though often repaired or rebuilt over the years, there is a nautical order and simplicity about such sites stemming from their exposed settings and constant care by disciplined crews and families.

Historical considerations lead quickly to scenic and symbolic ones. Historic significance ultimately comes down to a sense of integrity in the mind of the beholder. We can't see history, we must imagine it. This intimate yet ineffible connection explains why the automation and unmanning—and the subsequent deterioration—of Maine's island light stations is received as if it were an attack upon those who live and work in their vicinity. Every boarded up dwelling closes off a part of our lives; every demolished structure requires a personal sacrifice from those who knew it in better days.

The Future

The first step toward salvaging what remains of Maine's island light stations is completion of the inventory of properties eligible for nomination to the National Register. The Coast Guard's current policy making such an inventory contingent upon plans to modify specific lighthouses clearly hasn't worked. Changes are made whether an inventory has been conducted or not. For instance, the removal of lighthouse lanterns (the glassed-in enclosures housing the light source and lens) during installation of modern airport-type beacons has not been viewed as a negative modification. Yet few sights are more ludicrous than a massive granite tower holding up a mere lollipop of a light, as at Mount Desert and Wood Island Lights, two stations that have not been inventoried to determine their eligibility for the National Register. True, the glass in a lantern cuts the intensity of a light by 12 percent; but it also protects the light and provides shelter during maintenance operations. By removing the lantern the function of a lighthouse is modernized at the expense of its visual, architectural, and historical integrity.

But determining eligibility is not enough. Those light stations meeting National Register criteria should be nominated without delay. Neither the Coast Guard nor the Maine Historic Preservation Commission seems to have the funds or staff with which to intiate such actions. This is where local interest can take a particularly effective form. By documenting a station's history, layout, and condition, citizens can gather much of the data required for a determination of eligibility by the Historic Preservation Commission. Beyond that, incorporation as a nonprofit group

pledged to the upkeep of an eligible dwelling or station through a license agreement with the Coast Guard is a possibility. It is safe to predict that any light station not serving as a focus for local concern will not be preserved intact, no matter how scenic or historic it may be.

Dwellings at the following lights are particularly vulnerable: Baker Island, Egg Rock, Heron Neck, Little River, Perkins Island, Petit Manan, Ram Island, The Cuckolds, and Whitehead. Not all of these are Coast Guard properties: Baker Island is maintained by Acadia National Park, Perkins Island by the State of Maine, Ram Island by the Town of Boothbay Harbor, and Petit Manan by the U.S. Fish and Wildlife Service. The remaining 5 are under Coast Guard jurisdiction at lighthouses equipped with puretone fog signals. They cannot be reinhabited on a permanent basis or opened to the public until the noise problem is solved. Upgrading sewage disposal facilities to meet EPA standards is an issue at some, as is insuring an adequate supply of fresh water. These dwellings are in limbo, without function or a future. Ram Island and Little River have been excluded from the National Register, so they lack any protection on the basis of historical considerations. Egg Rock, Heron Neck, The Cuckolds, and Whitehead are all eligible, but have not been nominated.

Dwellings at Burnt Coat Harbor and Bear Island may be taken over by other federal agencies or sold at auction by GSA. The dwelling at Squirrel Point is a good candidate for licensing to an appropriate organization with sufficient motivation and funds to maintain it. Perhaps enough local interest will be channeled through the Cutler Association to give Little River dwelling a reprieve. Similarly, the Grand Banks Schooner Museum Trust may be granted a license to restore the Ram Island dwelling, a job the Town of Boothbay Harbor has been unable to accomplish. And at Egg Rock there may be hope that biologists from College of the Atlantic will obtain a license to use the dwelling as a base for seabird studies.

But for now lighthouse dwellings on Maine islands are an endangered species. Whatever their scenic or historic virtues, their continued existence is at risk. Those still occupied by Coast Guard personnel will survive as long as they fill a current or anticipated need for housing. A few have been maintained since the 1930s as vacation homes by private owners. Here and there a dwelling is incorporated in a public park or houses a museum. But the documented thrust is toward destruction. Exposed to the elements, isolated by fog and storms, expensive to maintain, sugject to noise pollution and wastedisposal problems, of uncertain

The Unmanning of Maine's Island Lights (Revised) (*Caisson Light)

			cions.
Date	Date		
	Unmanned		Location Device the second
1850	1932	Indian Island	Rockport Harbor
1898	1933	Doubling Point	Arrowsic Island, Kennebec F
1857	1933	Tenants Harbor	Southern Island
1875	1934	Avery Rock	Machias Bay
1890	1934	*Crabtree Ledge	Frenchman Bay
1850	1934	Grindel Point	Islesboro
1907	1934	Isle Au Haut	Robinsons Pt., Isle Au Haut
1853	1934	Narraguagus	Pond Island, Narraguagus B
1855	1934	Portland Breakwater	
1854	1934	Pumpkin Island	Eggemoggin Reach
1856	1934	Winter Harbor	Mark Island, Frenchman Bay
1857	1935	Blue Hill Bay	Green Island
1890	1939	*Lubec Channel	Quoddy Roads
1839	1954	Saddleback Ledge	Isle Au Haut Bay
1857	1957	Saint Croix River	Dochet, Demonts, or St. Croi
1857	1958	Deer Is. Thorofare	Mark Island
1838	1958	Nash Island	Pleasant Bay
1898	1959	Perkins Island	Kennebec River
1824	1960	Monhegan Island	Outer Muscongus Bay
1896	1960	*Spring Point Ledge	Portland Harbor
1839	1963	Eagle Island	East Penobscot Bay
1890	1963	*Goose Rocks	Fox Islands Thorofare
1821	1963	Pond Island	Mouth of Kennebec River
1831	1963	Whaleback	Portsmouth Harbor
1888	1964	Rockland Breakwater	Rockland Harbor
1897	1964	Two Bush Island	Two Bush Channel
1883	1965	Ram Island	Entrance to Boothbay Harbo
1905	1965	Ram Island Ledge	Portland Harbor
1828	1966	Baker Island	Off Mount Desert Island
1806	1967	Franklin Island	Muścongus Bay
1836	1972	Curtis Island	Camden Harbor
1837	1972	Moose Peak	Mistake Island, Eastern Bay
1817	1972	Petit Manan	Off Petit Manan Point
1858	1974	Bass Harbor Head	Mount Desert Island
1822	1974	Libby Island	Machias Bay
1892	1974	The Cuckolds	Booth Bay (Fog Signal 1892-1
1872	1975	Burnt Coat Harbor	Hockamock Head, Swans Isl
1871	1975	Halfway Rock	Casco Bay
1829	1975	Hendricks Head	Southport Is., Sheepscot Riv
1847	1975	Little River	Cutler Harbor
1875	1976	Egg Rock	Frenchman Bay
1830	1977	Mount Desert	Mount Desert Rock
1812	1978	Boon Island	Off York River
1839	1981	Bear Island	Northeast Harbor
1854	1982	Heron Neck	Greens Island, off Vinalhave
1898	1982	Squirrel Point	Arrowsic Is., Kennebec Rive
1804	1982	Whitehead	Muscle Ridge Channel
1827	1983	Matinicus Rock	Outer Penobscot Bay
Manned	Light S	Stations on the Islands	of Maine 1984
	- mgno c	Station (Established)	
			Vinalhaven Is., Fox Is. Thor
		Burnt Island(1821)	Boothbay Harbor
		Cape Neddick(1879)	Cape Neddick Nubble
			Cape Porpoise Harbor
		Great Duck Is (1890	Off Mount Desert Island
		Kennebec Riv (1898)	(Formerly Doubling Pt. Range
		101110000 1019.(1000)	Arrowsic Is.
		**Manana Is.(1855)	Off Monhegan Island
		Seguin (1795)	Off Kennebec River
		Wood Island(1808)	Off Saco River
**For S	Simal Ct	ation	OIL DOCU THIVEI

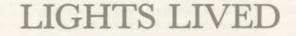
**Fog Signal Station

historic distinction-those that have been abandoned as a result of automation stand at civilization's trailing edge. Left without a purpose to fulfill, most of them will die out in our lifetime. Those few that manage to survive will do so by taking on a new role that warrants continued caretaking and esteem.

Stephen Perrin and his family own Burying Island in Tauton Bay, near Sullivan, Maine.

The Island Institute will serve as a clearing house for information and fund raising efforts to preserve a few of the remaining island light stations.

liver Isl. Bay ix Is. or 1907) ver en ofare



By Delia Mae Farris



ings across the Island. Kay pulled

on the hawser tied to the wheelbar-

row loaded with supplies for my 3 week stay. Ruth pushed Kay's con-

siderable butt up the boardwalk

behind the boathouse and got to

laughing so hard she couldn't catch

her breath. "Ye shall carry each

other's burdens". Ruth quoted as

she urged her sister up over the

brow of the boardwalk's steep slope.

The Birches

left at the crest of its rise up from

the boathouse. A small, open patch

of grassy swale to the right beckons

The boardwalk scoots off to the

...Ye that go down to the sea, and all that is there in the isles, and the inabitants thereof...Let the inhabitants of the meh sing let them give glory

habitants thereof. . .Let the inhabitants of the rock sing. . .let them give glory unto the Lord, and declare his praise in the islands.

Isaiah 42:10-12

For 17 years Little River Island was my home. My Father kept the Station there under the old Lighthouse Service, and later after 1939, under the U.S. Coast Guard. I have never left the Island. If I could be, I'd be right out there now. I have been back each year since I moved from it. Something seems to just call me there. It's in my blood. I love to watch the motion of the water. I am a Nature Lover.

Ruth Marie Corbett Farris

Putting for Little River by daylight or starshine, my companions are Corbett essences of years passed crossing the currents of my present. On a pull to the Island, I listen for the ghostly gabbling of black ducks that seems to float upon downy air. Brown weeds sizzle along the rocks as the water, softened by the mist, slides in and out. A little on shore run has been flattened out by the fog into a smooth green sea. At night my oars dip through "phos-firing" water—a reflection of the Milky Way spilling across the black skies above Destiny Bay.

my comsences of e currents all to the ostly gabseems to wwn weeds the water, my come currents ancient matriarchs of Little River wear moist, soft, green moss-aprons. Shelf fungi ladder up papery yellow trunks. In springtime, Ruth would hunt in the Grove for birds' nests. She led

the Grove for birds' nests. She led sisters Florence, Emily, and Kathleen to where a little fir tree grew right out from the crotch of a great mother birch. Some summer noons even grandmother Velma could be enticed to leave her hot kitchen and seek the shade of the Grove. For a picnic down in the Birches, the Corbetts would take 2 quart lard pails of cold bean soup, a bag of biscuts, a tin dipper, and agate-ware plates. Sometimes when Uncle Harlan, Purcell, or Wyman would come down to visit Velma and Willie, they'd all walk to the Grove, sit on stumps and rocks, and enjoy lobster stew, fish and clam chowder with vanilla or ginger cake for dessert, hardened up so's to last longer. Ruth's fall delights were running through the crackling leaves down in the Grove where it was more open.

The Oil House

The boardwalk's snakey length stretching tail-to-head from boathouse to the main dwelling darts past the old well curb just beyond the grove. A sense of sanctuary surrounds the little oil house building that one comes upon, tucked peacefully amongst the spruces. Cousin Pauline has always felt that the structure, now a paint locker, has the aura of a forest chapel about its solid, white-washed brick lines.

This miniature house held 4 big tanks of kerosene and was across from where the oil barrels used to sit. The rabbits of Little River had one of their favorite perches nearby. When the sun was strong in the day time, a rabbit always sat there dozing in the crook of a tree. Silent as an Indian, Ruth crept up on him one day and almost touched him before he hopped away. She felt the place where it was warm from his body laying on the perch.

The Pigpen

Out back of the paint locker is a faded path, spongy with lichens, leading to the remains of the pigpen. The outlines of the tumbled roof's cunning pitch, of the frail fence, trough, and foundation can still be faintly traced.

Ruth speaks proudly of their pigs having a nice house with a big window. Their dining area had a floor in it and the hogs had a backyard too. "We lost a 400 pound pig when Papa went off the Island one year for his month's vacation of deer hunting. The substitute keeper's kids got it to running and the poor critter tripped on the floor making up from the playyard and slid all the way to his trough where he struck hard and broke his shoulder. Nobody was around to take care of him right off-you are supposed to stick them first. He fevered up with pneumonia and the meat was ruined. We sure missed fresh pork at Thanksgiving that year and slabs of bacon come winter. What a terrific loss for our island family!"

Cousin Pauline and I often speak of the Corbett children's Halloween fun. They would trek down through the alders with homemade jack-olanterns to scare the pig. Scaring the pig on Halloween has always seemed symbolic of our mothers', aunts', and uncles' need to create festivity where none existed. And symbolic, too, of a collective island unconscious carrying us back to the Middle Age's custom of building stone lighthouses called 'lanterns of the dead' which gave protection against malicious ghosts on All Hallow's Eve.

The Barn

After skipping past the oilhouse, the boardwalk has to hike its trouser legs up over hummocks of sphagnum moss. It is so preoccupied in looking down at its feet, that a sudden glance upwards takes in with surprised gasp the full sweep of light tower, main house, and Grand Manan with its long, low back stretched out on the Bay of Fundy.

As caretaker of Little River, I found a precious nail or two that had

held the barn together as shelter for the Island's cows. The cows were no more cussed than the Corbett kids. One banged her head on a rock when she wanted her way. Another cow browsing stubbornly on the steep eastern side of the Island made a reckless reach for a taste of salty goose greens, lost its footing, fell, and broke its neck. Kay drank some



kerosene from a cruet on the mantel when Velma was filling Aladdin lamps. She was awful sick, but survived. The cow who drank 3 gallons of kerosene left uncovered in the oil house suffered a worse fate, as did the whole Corbett family. The creature sweated kerosene, oil appeared in its milk for weeks and weeks and it was no good for either milk or meat after that.

The Main House

"I tell you, commonsense! That's what's worth preserving from life on an island." Corbett Journal

My sister Celia and cousin Pauline pride themselves on running efficient homes as the wives of Cutler fishermen. They often express admiration and empathy for our grandmother Velma in the weekly rhythms she followed. The amount of work and planning around what to eat was far more routine back then on the island. There was a security in such regularity, like organizing one's activities around the tides. Everybody had to pitch in and help. The sheer volume of cooking and preparing meals required the boys to pitch in with the girls. We skinned, corned, salted, and sundried fish for the table. The boys not only gained first hand knowledge of sea faring and domestic animal caring, but they also darned socks, and helped wash and iron the clothes.

Monday was wash day, the biggest chore of the week for it was all done by hand. A fish chowder or vegetable soup would be put together for an easy meal that night. Tuesday was always ironing day. Churning butter was done on Fridays. When Willie's niece Emily came to visit she'd often get to fussing about the world coming to an end. Velma would calmly say, "Well, tell it to wait until I finish churning the butter."

Beans were baked on Saturday and soup would be made of the left overs. Dried fish dinners enjoyed Corbett style during the week were always followed the next day by fish hash. Purcell and Ruth consult each other to this day on whether or not it's a decent wind to put a cod or pollock out to dry. November on Little River brought a welcome change in the usual diet. Fresh pork scraps would be fried up to flavor the fish dinners and pork gravy would be ladled onto hot buttermilk biscuits.

Summertime meant that strawberries entered the kitchen at Little River by the 10 quart bucket to be hulled. Velma and the girls would pick over bog cranberries Neil and Purcell had raked out on Pond Ridge. They would then be put down sour in a crock for winter. Papa would boat bushel baskets of peas, chard, and beans over to the Island from the garden at his homestead down at the Cove in Cutler. Beet greens were fixed by the washtub full. Velma's brother Wyman always put his garden to sleep for winter with a nourishing blanket of seaweed. He even forked the stuff into the pig pen to give his swine a dose of sea minerals.

When all 10 of the Corbett brood were arranged around the big kitchen table for a meal, Velma ended up sitting practically on top of the stove. Velma served up vinegar kisses to the kids if they had been eating too many sweets and made tapioca pudding for guests.

One of my visiting relatives remembers, "The sound of the sea washing up in the rocks was all new to me. Those waves kept us up till midnight. Then when Willie flipflopped in his slippers downstairs and out across the boardwalk, slamming doors behind him as he went, I wondered what could be the matter. Bong! went the bell in the tower to answer my question. The fog had rolled in. Neither Newall nor I slept a wink that night. Willie was up early the next morning, frying plump donuts with his big white apron on."

The Spruces

The oil barrels have been rolled down the boardwalk and taken off the Island by the Coast Guard. The oily old squaws "oink-oink owdleowdle" offshore, unharried by Little River hunters. On the island, skunk spruces produce their pitchy oils in peace. Their spirits bearded with old man's beard hold a full moon like a giant cone hanging from their branches. One of those scraggly trees beyond the new uprooted oil barrels used to look just like a scruffy character Willie went hunting with, so the Corbett kids called it the Westbrook Spearing Spruce.

Purcell loved to go "a-gooming." He always got Ruth to go with him because she could unfailingly find the good spruce gum trees. He and Ruth pretty well cleaned up on them. A small heap of spruce-gold nuggets, the solidified ooze of pungent gum, would be the prize produced from their plaid wool coat pockets.

Newall's brother Ike Beam would row down to Little River on summer evenings to pay a call and play pitch with Willie. He could recollect when the white stone tower was pitch black. Old Thanky Davis when she came to visit the Corbetts couldn't get over how grown up the island was then. "Why, my land, the island was bare of trees when I lived here!' She'd declare. "You could stand on the knoll behind the house and look over town." Thanky and her sister Seeny who married Willie Wilder grew up on Little River when their father Lucias Davis was in the Lighthouse Service.

Velma sewed sheets, pillow cases, and her undergarments from flour bags with their color bleached out. They made decent material. She was always afraid she'd be caught dead in them. Ruth always told her where her one good change of bloomers and slip were. Velma died in 1946 wearing the step-ins and chemise she had made.

Ruth remembers her Mother, Velma, as not being a roamer. "She never walked around the Island like I loved to. She never seemed to have enough leisure time and besides, Mama felt the cold. She would just get to the tower and the boathouse on the boardwalk. Papa was the tough one."

Cousin Pauline is struck by how desperate our Grammy Velma would get for a change of scenery, never leaving the Island for months at a time. She'd willingly wrap her meager wardrobe in a newspaper and go visit Wyman's wife, Winnie, whose housekeeping was appalling. While on Monhegan, Velma made it down and back up the tiring grade of Lighthouse Hill once with a baby carriage and that was enough. Papa never cared for it if he had to look after the house, so keeper Steven's wife would come, just so Velma could get out for an airing. Velma spent 7 months straight in the solitude of Southern Island. Papa would go across to Tenants Harbor to play pitch. Marm journeyed from Roque Bluffs to Southern Island on one occasion with the express intent of minding the kids so Velma could go up town. Papa wouldn't let her. "He was funny that way," Ruth states.



Entertainment

When Velma struck up a chord on the piano and Willie tuned the fiddle his Father had passed along a talent for, Little River's rafters and rocks would resound with robust singing. The Corbetts never tired of the maritime hymns, "Let the Lower Lights Be Burning" and "Jesus Savior, Pilot Me." Cross Island, just to the west'ard of Little River, had a fine hardwood floor in its roomy Life Saving Station. Willie and his musician friends would pack up their instruments and motor from Cutler to Cross Island on a balmy Saturday evening in summer. There they would play and dance until the midnight moon drew them back across the waters to the Harbor. Ruth and her sisters would be fast asleep after having made their own fun. They'd go to bed early and tell each other scary stories made up from their own imaginations.

"On a rainy day, we'd curl up with 9 or 10 apples brought from the bin in the cellar (I picked out the best ones for Papa). We'd devour them along with our most favored books. I read again and again the *Mother* West Wind Series, plus Edward Rowe Snow's Lighthouse of New England. He was our Flying Santa Claus. The day he dropped presents on Little River was as thrilling as the day a dirigible floated over the island in a hush of huge, silent silver.

Nature

Come away by yourselves to a lonely place and rest awhile. Mark 6:30

Be still and know that I am God Psalms 46:10...

Ruth could hardly wait to go barefoot in the springy reindeer lichen realms. Like a true Island of the Blue Dolphin's child, she'd curl up on pungent crowberry mats. The swamp enticed her with its sanctuary of spiders. Their webs hung like little grossamer hammocks, or like so many delicate sheets spread to dry. "Purcell put some stuff across the swamp's drainage and we used to skate there. Would have been better if the hummocks of sphagnum moss had their tops sliced off!" Now the boggy Island ground offers damp footing for a wild herb Thoreau considered a choice fare - Laborador Tea.

Ruth and the girls played hens and chickens with periwinkles. The boys and she smashed conkles to catch harbor pollack with the mollusk meats inside the shells. She made friends with the seals who snuffled while eying boats pushing off from the slip. When their heads surfaced, Ruth would whistle and call them by name. "I didn't care if anybody visited me, I had my special walks in nature. I made a trail right around the whole 16 acres of the Island."

The Micmac in Willie, woven through his lineage like a blade of sweet grass, came out in Ruth as a kinship with all creatures, and showed up in the boys as a craftiness with hunting. The Native Peoples who canoed up into Marsh Cove to gather sweet grass in the 1930's had a feel for their paddling that was shared by the Corbetts in their rowing form.

When grub was low in the winter, Willie would get himself a partridge down in the Grove. Myron remembers shooting a record four migrant partridges out of one particular yellow birch they were all feeding in. Purcell recalls eating a lot of sea birds when the hens played out: "Old squaws were sometimes our Thanksgiving turkeys. We'd salt them and put the baking sody to them and soak the oil out of them. They were gamey, but good. Occasionally we'd spit bird shot out of a mouthful of seabird stew."

Animal encounters leave a track through Myron's Island memoirs. Florence and he met an enormous whale in the eastern passageway. It blew at close quarters and rocked their rowboat. The Corbett brother's hunting and trapping skills sprang up from watching the ways of the wild critters who called Little River their home, too. Myron eyed a mink stalking a seabird to feed her litter of wee ones in their Island nursery. The boys harvested 16 snowshoe rabbits from breeding stock from a pair who swam over to Little River Island. Wildcats occasionally were sighted swimming in the Little River channel and stirred Purcell and Neil to follow them to the mainland. They bagged by rope a deer which was using the Island as a shortcut to Eastern Head from Flagtown. Willie, who had tramped several weary miles of terrain toting his 303 Savage that day, came home empty handed, only to find the lassoed deer hanging in the barn!

The Light Tower

In Thy Light do we see Light Psalms 36:9

The Corbett's island responsibility revolved around the day to day routines of keeping the Little River wick shining reliably 13 miles to seaward. On the watch for distress at sea, ever wary of breakdowns in vital machinery, constantly in readiness for the Government Inspector, the upkeep of Little River Light Station fixed orderlines and alertness right into the very bones of the Corbett family.

The boys would wind up the flash for their father a half hour before sunset. Lighting up time often meant carrying kerosene up to the work area, being extra careful not to spill a drop on the iron floor. "Under peril of your very life." That warning and accompanying scowl from Willie still ring in Myron's mind. Wipe up, polish up, clean up, were the way of life in the tower. Great caution had to be taken to avoid a blackout. Papa had a pick for the big candle in the tower. That was a handy tool to keep the kerosene hole clear for flowage with a mix of air. The oil was pumped by 30 pounds of pressure from the work area floor's fuel tank to the lantern deck.

A smoke-up of the vaporizer or mantle of the lantern meant the entire area of the deck would be covered by black soot. Scrubbing up the great mass of glass lenses, prisms, window panes, curtains, lens shrouds, and brasswork had to be done *fast*. Brasswork was the bane of all lightkeepers and their cussedness came in part from having the brasswork all polished up to perfection just before a fog mull would roll in and away would go the shine.



As Myron puts it, Willie may not have been "Master of All He Surveyed", but he was responsible for much of it just the same. When Little River took on its nighttime identity, it was the only American light visible in that sector of the Maine Coast. Winding up the weights which kept the lens revolving around the lamp in the tower was good for only 16 hours. One rain-drenched midnight when Papa slippered out in his night gown to wind up again, he skidded on the slippery walk leading from house to tower. Willie's broad bottom landed right square on the earthenware thunderjug which had been set out on the porch to soak. He smashed that crock to smithereens!

Willie was a tough old bird. He attributed his hardiness to eating what he damned pleased and to climbing all those lighthouse stairs. Their spirals up around the cathedral windows of the tower are repeated in the graceful curves of the main dwelling's staircase. The tower's heavy, arched door now locks out any Corbetts who may wish to bring their kin for whale watching or bird spying from the fine vantage point of the outside lantern deck. Its solid platform some 120 feet above the waterline was where Willie's children got their ornithology education. They picked up and studied limp, feathered bodies stunned in migratory flight from striking the windows of the blinding light.

The Bell Tower

The foghorn seemed to be the voice of the island itself, lost and despairing.

Lighthouse Island Elizabeth Coatsworth

The regular round of station duties moved from shutting up the oilhouse's kerosene fumes, to washing off the light tower windows, to keeping the fog bell ready to ring. It was housed in a pyramidal wooden tower perched on the ledges right out over where the sea rolled, showing the whites of its eyes.

"Keep a watch out for that fog bank, it's time to go down and tend the bell." Those words from Willie meant winding up the bell, for it ran by clockwork weights just like the revolving lens in the light tower. Sometimes the mechanism broke down for starting up the bell and the Corbett kids would be sent down with hammers to bang on the bell and warn any ships away from the fog-shrouded rocks.

On clear days when the *Hibiscus* or *Ilex* were sighted coming around Western Head and making for Little River with their coal and oil cargo, Willie would shout, "Run down to the tower and ring the bell to salute the Lighthouse tender!" Ruth wished for ear muffs when she was swinging the bell tongue by hand. Nowadays, she pulls the rope in the Cutler Methodist tower and delights in hearing the peal of the church bell reverberating from Little River's rocks.

The picked pointy bell tower was swept off its foundation by Hurricane Edna in 1954. The faithful bell hung for a while in a metal frame before giving away to a foghorn. The banging of the gong buoy off Eastern Head is a lonesome reminder of the bell that once rang in Little River Island. That bell buoy sounds like a Corbett cowbell ringing, ringing ceaselessly with the motion of the waves.

With automated mechanisms now driving both Little River's horn and light, they feel cold to us Corbetts—the groan and gleam of machines without the steady beat of a shining human heart. The beam and blast of Little River are answered by the lights and lungs of four Canadian stations —Seal Island, Briar Island (visible only in the calm before a storm). Gannett Rock, and Southern Head on Grand Manan Island which basks like an immense shark on the horizon.

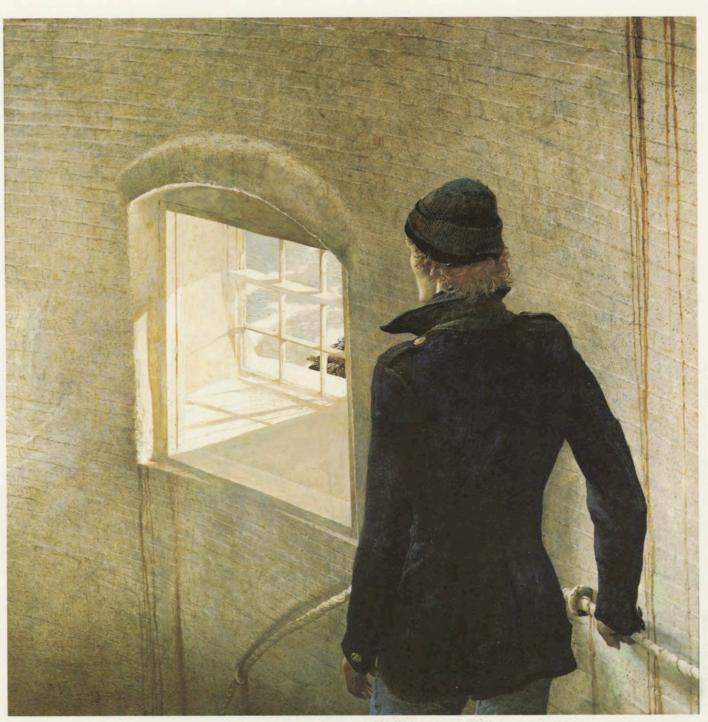
September 28th's entry in my 1975 Island Journal:

12:30 p.m.-On this, my last day as keeperess of Little River in the Corbett tradition, I'm as sad as Mother must have been to leave after spending the first 17 years of her perpetual childhood here. But a vision has just come into surprising view, the Island's way of saying good-bye. I was up in the Boy's Room packing and heard a sound like luffing. I caught a glimpse out of the corner of my eye of a white billowing, and there making for the mouth of Cutler Harbor was a green sloop with a little dinghy dangling behind. Her sails were taut as a pair of goose quills and they smartly bore her along in a sharp, late September breeze. A crew of watchcapped fellows were in the cockpit, leaning as her keel almost came clear out the water. A precious image from the past when this channel was the passageway for many a canvas clad lady.



Ruth feels sad that nobody is living on Little River now. In her letters to me, each mention of the Island structure's steady deterioration, painfully expressed. "I feel terrible for the Maine Islands with vessels going around their automated light stations and seeing the sorry conditions most of them are in. The last time I went inside the Little River dwelling was in November of 1983. My old home's windows and doors had been all boarded up. But I said to myself, Maybe the Coast Guard left the cellar door open! By gorry, they had. I struck a patch of ice in the basement that was big enough to skate on. We used to have a nice drain trough for the water to run through. How dingy the house was inside! The only things that looked familiar to me were the radiators, bread board, and the gun rack that Gramp Johnson had made. I tell you, after living there, it is not very good to have these hideous things happen.'

Delia Mae Farris is a school teacher in Bristol, Maine.



"THE REEFER" ANDREW WYETH

The Island Institute has received a gift of 10 signed and numbered Artist's Proof collotypes of The Reefer. These limited edition reproductions are available to Founding Members. Please contact the Island Institute for additional information concerning Founding Memberships.

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We believe the Maine islands are a nationally significant resource where a unique culture has interacted with an intact biological community for over four centuries. We believe that those resources and the culture which is dependent upon them are threatened by complex development pressures which need to be examined and discussed in broad-based forums of islanders, island users and seasonal users.