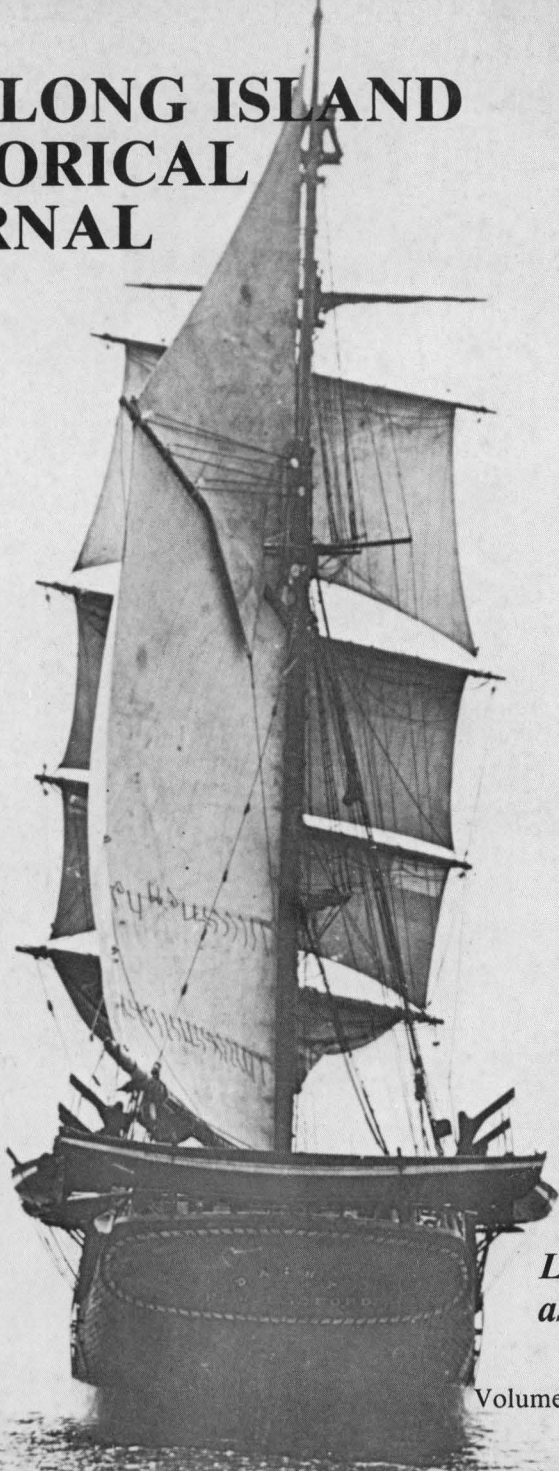


THE LONG ISLAND HISTORICAL JOURNAL



*Long Island
as an Island*
Fall 1989

Volume 2 • Number 1

**The Long Island
Historical
Journal**



"Starting from fish-shape Paumanok where I was born..."

Walt Whitman

Fall 1989

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THE LONG ISLAND HISTORICAL JOURNAL

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Cover: The *DAISY*, photograph, ca. 1912, Robert Cushman Murphy. Courtesy, The Whaling Museum, Cold Spring Harbor.

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**THE
LONG ISLAND SAVINGS
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Applauds the

LONG ISLAND HISTORICAL JOURNAL

for its Fall 1989 Issue on

LONG ISLAND AS AN ISLAND

EDITORIAL COMMENT

This issue is devoted to Long Island as an island, featuring articles on the Sound, Bay, and bridges, whaling, fishing, and shipbuilding, and whether the island really is a peninsula.

Because 1989 is the three hundred and fiftieth year since the coming to Gardiner's Island of its illustrious patentee, we begin with two articles, one by Roger Wunderlich on the life and times of the first Lion Gardiner, the other, by Richard P. Harmond on the problems of his fifteenth- and sixteenth-generation descendants, striving to maintain the family's unbroken line of ownership.

We proceed chronologically, from Geoffrey Rossano's analysis of eighteenth-century shipbuilding to freshly studied presentations of two groups of unsung whalers—John Strong's on east end Native Americans, and the painstaking research of Floris B. Cash on black whalers of Cold Spring Harbor, Sag Harbor, and Greenport. The steamboats that plied Long Island Sound are examined by Edwin L. Dunbaugh, with a view from the Connecticut side by Andrew German, of Mystic Seaport. Lawrence J. Taylor illuminates the golden age of oysterfishing in Great South Bay. Bernice Braid interprets the artistic impact of John A. Roebling's Brooklyn Bridge, followed by Jeffrey A. Kroessler's survey of the Queensboro, Triboro, Throgs Neck, and other bridges that link us to the outside world. R. Lawrence Swanson's coda sums up a 1985 Supreme Court case that would have delighted Lewis Carroll, in which Long Island was ruled to be a peninsula. In addition, we offer probing reviews of important books by leading Long Island historians.

We were able to expand the number of pages because of our readers' support and some timely grants, acknowledged below.

Your *LIHJ* is not a fledgling any more, but it can not spread its wings unless all subscribers to Volume I renew for Volume II and new readers fill out the subscription blank on page 139. Next spring we will publish another collection of significant, interesting articles. Meanwhile, please help us to grow—we depend on your support.

The Editor



Lion Gardiner monument, Old Saybrook, CT

Photo by Geoffery Rossano, 1989

“An Island of Mine Owne”: The Life and Times of Lion Gardiner, 1599-1663.

By Roger Wunderlich

(The original spelling and punctuation is preserved in quotations in this article.)

In the year of our Lord, 1635, the tenth of July, came I, Lion Gardiner and Mary my wife from Woerden a towne in Holland, where my wife was born...to London and from thence to New England and dwelt at Saybrooke forte four years... of which I was commander: and there was borne to me a son named David, 1636... the first born in that place, and in 1638, a daughter was born named Mary...and then I went to an island of mine owne which I had bought and purchased of the Indians, called by them Manchonake by us the Isle of Wight, and there was born another daughter named Elizabeth ...1641, she being the first child of English parents that was born there.

— Lion Gardiner, lines in a family Bible¹

Gardiner's Island is doubly distinguished for being the first English settlement in the present state of New York and the only North American manor still in the hands of descendants of its original patentee. This article measures the thoughts and acts of the founder, Lion Gardiner, whose lifetime spanned the stirring years of the rise of the Dutch Republic, the fall and restoration of the monarchy in England, and the beginning of emigration from the old world to the new.²

Lion Gardiner was a leader in the first wave of English settlers of New England and Long Island. In 1635, while serving in an English regiment stationed in the Netherlands, he was hired by opponents of the state and church of England to build a fort at Saybrook, at the mouth of the Connecticut River. At the end of his four-year contract he crossed the Sound to become the first of an unbroken line of lords of the manor of Gardiner's Island, a fertile sliver of land between the forks of Paumanok. At first it was known as the Isle of Wight, the name he gave it because of its contour; the Indian name, "Manchonake," meant a place where many had died, perhaps from some great sickness that swept the east end of Long Island before the coming of the English.³ After becoming a leader and landowner in the newly formed town of East Hampton, he moved there in 1653, entrusting the care of his island to retainers. A few years later he was the catalyst for the creation of Smithtown, conveying to William Smythe the 30,000 acres given to him by the Montauk sachem,

Wyandanch, whose daughter Gardiner had ransomed when she was kidnapped by Narragansetts.⁴

His ancestry has not been traced, but according to Curtiss C. Gardiner, who wrote the history of his famous ancestor on the two-hundred-and-fiftieth anniversary of Lion's arrival at his island, "He was probably a gentleman without title, of the middle rank, between the nobility and the yeomanry, yet he might have been a yeoman."⁵ Lion's army grade was sergeant, as evidenced by letters to John Winthrop, Jr., the governor of the Saybrook colony and Gardiner's only superior there, in which one correspondent referred to "Seriant Gardener," another to "Sergiant Gardiner." Lion's later rank of "Leiftenant" was a promotion for his service at Saybrook.⁶ Granted that seventeenth-century spelling was on a do-it-yourself basis, Lion generally signed himself as "Gardener," a name which Curtiss C. Gardiner pointed out "may be derived from an occupation, the keeper of a garden," and subsequently "may have been changed...to Gardiner, that the occupation and the name of a person might be the more readily distinguishable." His unusual first name "was Lion, as he invariably wrote it so"—there is no reason to speculate that his baptismal name was Lionel.⁷

Nothing is known of Lion's life before 1635, the starting point of his memoir, "Leift. Lion Gardener, his Relation of the Pequot Warres." While serving as "an Engineer and Master of Works of Fortification in the legers of the Prince of Orange, in the Low Countries," he was recruited by Hugh Peter and John Davenport, the exiled Puritan ministers of the English church of Rotterdam, and "some other well-affected Englishmen of Rotterdam," to build and command a fort in New England.⁸ The project was sponsored by upper-class dissenters from the government of Charles I, the king who during the 1630s suspended Parliament, demanded Anglican orthodoxy, and levied unacceptable taxes. In addition to Davenport, who became a founder of New Haven, and Peter, a firebrand chaplain-to-be of Cromwell's army and Protectorate, its supporters included Viscount Say and Sele (William Fiennes) and Baron Brooke (Robert Greville), the spokesmen in the House of Lords of the Puritan opposition; Sir Arthur Haselrig, a prominent rebel in Commons, and George Fenwick, another member of Parliament who defied the royal authority. Of these, only Fenwick came to live at the fort—it was he who named the place Saybrook to honor its two main sponsors. Once the Long Parliament convened in 1640, and especially after war with the Crown erupted two years later, the organizers lost interest in Saybrook; Fenwick sold it to the Colony of Connecticut in 1644, before returning to England to resume his seat in Parliament and command a militia regiment.⁹

Lion's commander in Holland was Sir Thomas Fairfax,¹⁰ the future general of Cromwell's army. His Saybrook employers were ringleaders of the movement that eventually overthrew the monarchy, beheaded the king, and instituted a republic in England: it seems unlikely that this association of dissidents would have sought to hire him had he not sided with their cause. In his memoir, however, Gardiner expressed no political

viewpoint in connection with going to Saybrook. He may have sympathized with his employers; it is equally plausible that this unblinking realist took the job for the one hundred pounds a year it paid and the opportunity to begin married life as a leader of a bold and prestigious venture.

As it turned out, Saybrook was a disaster. "According to promise," wrote Lion,

we expected that there would have come from England 300 able men, 50 to till the ground, and 50 to build houses. But our great expectation at the River's mouth, came only two men, Mr. Fenwick, and his man...

A recent historian of the Winthrops found that after five discouraging months, John Winthrop, Jr., Gardiner's superior,

quit Saybrook...before the end of his term as governor, and left Lion Gardiner in charge of the thinly manned outpost, to spend a miserable winter [1636-37] behind the palisades, beleaguered by Pequots,¹¹

Somehow Lion managed to shepherd his small flock of settlers through the hardships of that bitter season, when he

had but twenty-four in all, men, women, and boys and girls, and not food for two months, unless we saved our cornfield, which could not possibly be if they came to war, for it is two miles from our home.¹²

The war he dreaded was with the Pequots, the local Native Americans with whom traders had been skirmishing, and whose extermination was held necessary by many New England settlers. As a harbinger of impending conflict, twenty Massachusetts Bay men raided the Pequots and marched home again, to Lion's "great grief, for, said I, you come hither to raise these wasps about my ears, and then you will take wing and flee away." He was a pragmatist, not a pacifist. He disapproved of small sorties that resulted in counterattacks on his vulnerable fort, in one of which he was shot in the thigh by a Pequot arrow. But in 1637, when Captains John Mason and John Underhill led a large force of colonists and Indian allies against the Pequot stronghold, Lion rejoiced in the "victory to the glory of God, and honor of our nation, having slain three hundred, burnt their fort, and taken many prisoners." Although he praised the outcome, he criticized the carnage as the avoidable result of violence and counter-violence that began with the murder of a Pequot by an Indian friendly to Massachusetts:

Thus far I have written in a book, that all men and posterity might know how and why so many honest men had their blood shed, yea, and some flayed alive, others cut in pieces, and some roasted alive,

only because...a Bay Indian killed one Pequit...¹³

The Pequot's defeat led to Gardiner's meeting Wyandanch, "next brother to the old Sachem of Long Island," who visited Saybrook three days after the battle. Although Gardiner called them brothers, it is more likely that Wyandanch was next in line to succeed the "old Sachem," Yovawan, whom the English called Pogtatucut.¹⁴

The purpose of Wyandanch's call was to "know if we were angry with all Indians," or only with Pequots. In his typically blunt and practical manner, Lion answered "No, but only with such as had killed Englishmen." When Wyandanch asked for the terms on which the English would trade with "they that lived on Long Island," Lion gave him a conditional yes— "If you will kill all the Pequits that come to you, and send me their heads, then...you shall have trade with us." Wyandanch said he would bring this news to "his brother...and if we may have peace and trade with you, we will give you tribute, as we did the Pequits." From that time on, east end Indians transferred their allegiance and annual payment of tribute from mainland Native American to English "protectors." Gardiner sealed his bargain with Wyandanch with the stern demand that:

If you have any Indians that have killed English, you must bring their heads also...so he went away and did as I had said, and sent me five heads, three and four heads for which I paid them that brought them as they had promised.¹⁵

It was not a squeamish age. Settlers captured by Native Americans sometimes suffered deaths as horrible as that inflicted by fellow-Englishmen on the Reverend Hugh Peter, who shortly after the Restoration was hung, drawn, and quartered after being forced to witness the similar fate of a friend.¹⁶ The price of peace was harsh indeed, but the pact between Gardiner and Wyandanch, and the lasting friendship that followed, relieved eastern Long Island of the English-Indian warfare that plagued New England for forty years from the Pequot War through King Philip's War. The nineteenth-century Long Island historian, Nathaniel S. Prime, wrote of Wyandanch that:

Though often cajoled and threatened by the N.E. Indians to induce him to conspire against his new neighbors, he not only rejected their overtures *but even delivered their agents into the hands of the English* (emphasis added). He reposed unbounded confidence in Lion Gardiner; and communicated to him, without reserve, every thing that involved his own interests, or the safety of the whites.

This image of Wyandanch as a statesman who crossed racial lines to preserve the peace was countered by Gaynell Stone, a current scholar, in the previous issue of *LIHJ*:

Wyandanch was a figurehead supported by the English...to consummate their continuing land purchases...Perhaps he had no choice, caught as he was between two aggressive forces, the Narragansetts and the English.¹⁷

Soon after Winthrop left Saybrook, Lion wrote to him that those who remained would be loyal and work hard for the colony, but “it seemes wee have neather masters nor owners.” If not provided for, he continued, “then I must be fforced to shift as the Lord may direct.”¹⁸ To shift as the Lord may direct was something that Lion did incredibly well. At the expiration of his contract, with his family and some farmer-soldiers from the fort, he “went to an Island of mine owne,” seven and a half miles long and three miles across at the widest point, a few miles off shore from East Hampton. The description of Gardiner’s Island in 1798 by its seventh-generation proprietor might well have applied to the island in Lion’s time:

The soil...is good & is very natural for Wheat and White clover. The timber is of various kinds, mostly large White oak...The land is well watered with brooks, springs & ponds....Beef, Cheese, Wheat, and Wool are the staple articles ...Fish of various kinds may be procured at almost any time. For fertility of soil & for various advantages it is not perhaps exceeded by many farms in the United States.¹⁹

The price was “ten coates of trading cloath,” paid to “Yovawan Sachem of Pommanocc and Aswaw Sachem his wife” for Lion Gardiner and his heirs “to have and to hold...forever (as of) the third day of the moneth, called, by the English May in the year by them of their Lord...1639.”²⁰ Ten months later, Lion obtained a confirming grant from the agent of the Earl of Stirling, the king’s grantee for Long Island and its adjacent islands. For the consideration of five pounds a year he was empowered,

to enjoy that Island...he hath now in possession, Called ...by the English the Isle of Wight...forever....And also to make Execute & put in practice such Laws for Church & Civil Government as are according to God the King and the practice of the Country *without giving any account thereof to any whomsoever* (emphasis added).²¹

Thus the Gardiners were undisputed rulers, “independent of every other settlement, and subordinate only to the general government of the Colony.”²²

This form of absolute control was markedly different from the polity of the east end towns of Long Island created by associations of believers, who crossed the Sound from New England beginning in 1640. Like

Gardiner's Island, the new communities of Southold and Southampton found themselves outside the orbit of domination, so distant were they from the centers of Dutch and British power during the middle years of the seventeenth century. Together with East Hampton, Shelter Island, Brookhaven, Smithtown, and Huntington, these towns were, wrote Nathaniel S. Prime, "absolutely in a state of nature, possessing all the personal rights and privileges which the God of nature gave them, but without the semblance of authority one over another." When they found it expedient to ally themselves with New England, it was not because of doubt that they could manage their internal affairs, "but solely for defence from foreign aggression. And the nature of the union was rather that of an alliance than subjection."²³

At Gardiner's Island, title to land and power to make decisions were reserved to the lord of the manor. Yet once Lion moved to East Hampton he joined his fellow-pioneers as a responsible and cooperative citizen. As a member of the East Hampton church, he was instrumental in the selection of the first minister, Thomas James, a young man about whom he wrote to John Winthrop, Jr. in 1650, the year the church was gathered. The letter began with a proposal to sell ten cows to Winthrop, "for fiftie pound, in good marchantabl wampem, bever, or silver." As for the fledgling church, declared Lion in keeping with Puritan striving for a congregation of visible saints, it aimed for quality, not quantity: it would rather part with some of its members than "resave more without good testimonie." East Hampton was willing to pay "the young man you writ of...20*li* a year, with such diat as I myself eat, til we see what the Lord will do with us." In a passage illustrative of Lion's erudition in a time of widespread illiteracy—his history of the Pequot War was peppered with biblical quotations—he asked Winthrop to tell the "yung man (who) hapily hath not manie books...that I have...the 3 Books of Martyrs, Erasmus, moste of Perkins, Wilsons Dixtionare, a large Concordiance, Mayor on the New T(e)stement."²⁴

Gardiner and James became bosom friends, a relationship that expanded from pious to business matters. A 1658 entry in the East Hampton Town Record reported that "Wyandanch, Sachem of Long Island," gave half of all whales cast up on the beach from "Nepeake eastward to the end of the Island" to "Leiftenant" Lion Gardiner, and the other half to Thomas James. The "first good whale" was given "freely and for nothing," after which the grantees would pay "what they shall Judge meete, and according as they find profit by them."²⁵

Lion's mind was not burdened by superstition, as proven by his reaction to an accusation of witchcraft. The defendant, Goody Garlick, was charged with causing the death in childbirth of none other than Lion's young daughter, Elizabeth Howell, in 1657. Perhaps because Goody and Joshua Garlick, her husband, worked for him for many years, or perhaps because he had too much common sense to believe in "black cats and harlequin devils...Lion seems to have exerted himself in behalf of this unfortunate woman," wrote Alexander Gardiner; Lion's influence averted a trial at

Hartford and saved Goody "from an awful fate."²⁶

East end settlers and Native Americans never met on the field of battle, but the Montauk and Narragansett Indians fought in 1654, each side frequently raiding the other. In one such attack the Narragansett warlord, Ninigret, swooped down on the camp of Wyandanch on the night of his daughter's wedding, killed the groom, and kidnapped the bride. On behalf of the grief-stricken father, Thomas James begged John Winthrop, Jr. to help to speed delivery of the wampum raised for ransom, "which he [Wyandanch] hears was intercepted by Thomas Stanton [a colonist]." "At last," wrote Curtiss C. Gardiner, "through the exertions of Gardiner...(the young woman) was redeemed and restored to her afflicted parents."²⁷

To express his gratitude, Wyandanch, with his wife and son, made a free gift to Lion Gardiner, "his heirs, executors and assigns forever," of land that "lyeth on Long Island...between Huntington and Setauket... [and] more than half way through the island southerly." Dated East Hampton, July 14th 1659, the deed acknowledged twenty-four years of Lion's "kindness...counsell and advice in our prosperity," with special remembrance that,

in our great extremity, when we were almost swallowed up of our enemies—...he appeared to us not only as a friend, but as a father in giving us money and goods, whereby we defended ourselves, and ransomed my daughter.

Above the marks of his son, Wiankombone, and "The Sachem's Wife," the signature of Wyandanch is a drawing of two stick figures shaking hands, an unusual gesture of affection and equality. Yet a skeptic may wonder who worded the document, which states that now that the sachem and his wife are old, "we have nothing left that is worth his [Lion's] acceptance but a small tract of land left us, [which] we desire him to accept," a strangely modest description of 30,000 prime acres.²⁸

In 1660, the governor of Barbados, who was a friend of John Winthrop, Jr.'s, expressed interest in buying Gardiner's Island. Oh no, wrote Lion to Winthrop, "I having children and children's children, am not minded to sell it att present." Not "att present" or ever would this island leave possession of the Gardiners (although, in the article following this, Richard P. Harmond reports that it nearly changed hands several times in the present century). "Butt I have another plac," went on Lion, "(I suppose) more convenient for the gentleman that would buy, liinge upon Long Iland, between Huntington and Setokett."²⁹

When this sale fell through, Lion and his son, David, conveyed to Richard Smythe (Smith) the land that would be the principal part of the future town of Smithtown. Smythe, a friend of Lion's, was one of the three English witnesses to Wyandanch's deed; it is said that Wyandanch's daughter was returned to her father at Smythe's home in Setauket, where the grateful sachem presented his gift of land to Gardiner. Lion died soon after this, and his son, David, consummated the sale to Smythe. Readers

in search of a thorough analysis of the creation of Smithtown (and why it had nothing to do with a ride on a bull) are referred to the chapter by J. Lawrence Smith, in the W. W. Munsell *History of Suffolk County*, cited previously in this article.

The death of Wyandanch, in 1659, prompted Lion to say: "My friend and brother is gone, who will now do the like?"³⁰—a lament with ambiguous overtones. But if Lion used his friendship with Indians to his advantage, his trust in them was sincere. When Wyandanch was ordered to testify before the magistrates of Southampton, and his people feared for their sachem's safety, Lion, who happened to be at the Montauk camp, presented himself as a hostage. "I will stay here till you all know it is well with your Sachem," he declared, in his strong, terse, style, "If they bind him, bind me, and if they kill him, kill me." All's well that ends well, albeit somewhat grimly; Wyandanch found the four Indians who committed the murder in question "and brought them to Southampton, and they were all hanged at Hartford..."³¹

Lion died at the age of sixty-four, one year before the English conquest of New Netherland from the Dutch; the creator of its first settlement never heard the words "New York." New patents were issued after the conquest and again when the Duke of York reorganized the province in 1683. In 1665, the English Governor, Richard Nicolls, gave David Gardiner a grant for the Isle of Wight at an annual quit rent of five pounds. Five years later, the rent was commuted to one lamb yearly, upon demand, by Governor Francis Lovelace. In 1686, David received a new patent from Governor Thomas Dongan, who erected the Isle of Wight "a lordship and manor to be henceforth called the lordship and manor of Gardiner's Island." The rent of one lamb a year was renewed, as was the Gardiner's sovereignty. In the judgment of Benjamin F. Thompson, the nineteenth-century Long Island historian, the fees for these parchments were "perquisites of the governors...to fill their pockets at the people's expense"³²

Their ownership remained uncontested, but the Gardiners' unlimited powers were curtailed in 1688 when the island was annexed to Easthampton (then one word): from then on, "the island remained a manor and a lordship, paying taxes to Easthampton. David owned the island, but he was no longer in undisputed control over it—he must listen to the magistrates of Easthampton, and obey their laws."³³ Power to hold court-leet (criminal) and court-baron (civil), as well as the advowson (the naming of clergy), and other ancient rights issued to David were never exercised—they were given in anticipation of the island's "becoming a numerously tenanted estate,"³⁴ which it did not.

Future articles in the *LIHJ* might compare Gardiner's Island with the manors of the Lloyd, Floyd, Nicoll, Smith, Van Cortlandt, and other families, and the manorial system, in turn, with the main stream, town-meeting polity of the early towns. Lion Gardiner, his island, holdings, policies, and descendants—now in the sixteenth generation—are also subjects for further study. The influence on American history of soldiers

trained in the Netherlands—John Smith, Lion Gardiner, John Mason, John Underhill, and many more—is an under-explored topic for research, as is the relationship between the first wave of English settlers and the English Revolution.

Lion Gardiner, the pragmatic soldier-statesman, was the autocrat of an island who functioned equally well within the commonwealth of East Hampton. He learned the language and gained the trust of his Indian neighbors, treating them without condescension and fairly, given the context of his times; largely due to his diplomacy, the interracial warfare that plagued the mainland was not repeated on eastern Long Island. And by inducing his sachem friends to sell him large tracts at small prices, confirmed by English deeds, he acquired a fortune in Long Island land.

This year marks the three hundred and fiftieth anniversary of the founding of Gardiner’s Island. Lion and his hardy wife, Mary, who left her comfortable home in Holland to cross the ocean with her husband and suffer the rigors of frontier life, are symbols of the transition from the old world to the new by the first generation of emigrants. They were Americans long before the word was coined.

NOTES

1. Curtiss C. Gardiner, *Lion Gardiner and His Descendants* (St. Louis: A. Whipple, 1890), 3. These lines, in Gardiner’s hand, were written in a Geneva Bible found many years after his death. First published in 1560, the unauthorized, pocket-size Geneva Bible, with Calvinistic marginal notes, was the pre-King James version favored by the English laity. The copy inscribed by Gardiner was published in 1599.

2. Lion Gardiner is his own best source, in “Leift. Lion Gardener, his Relation of the Pequot Warres,” *Collections of the Massachusetts Historical Society*, Vol. III, 3rd Series (Cambridge, 1833), 131-60. The manuscript, written at East Hampton in 1660, was found in 1809 among the papers of Gov. Jonathan Trumbull of Connecticut. Also see his letters to John Winthrop, Jr., in the Winthrop Papers, *Collections of the Massachusetts Historical Society*, Vols. X, 3rd Series, VI and VII, 4th series, and I and VIII, 5th series, and *Records of the Town of East Hampton*, 5 Vols. (Sag Harbor: James H. Hunt, 1887), Vol. I, passim (hereafter cited as E.H.T.R.). Of the secondary sources for Lion and later Gardiners (written mainly by descendants), the best is by Curtiss C. Gardiner, cited above. Also see John Lyon (most later Gardiners with this name were Lion, but some were Lyon) Gardiner, “Notes and Memorandums Concerning Gardiners Island, Written in May 1798 by John Lyon Gardiner the Present Proprietor of That Island...”, *Collections of the New-York Historical Society for the Year 1859* (New York, 1970), 260-272; Alexander Gardiner, “History of the Gardiner Family,” *Collections of the Massachusetts Historical Society*, Vol. X, 3rd Series (Boston, 1846), 173-185; and Sarah Diodati Gardiner, *Early Memories of Gardiner’s Island (The Isle of Wight, New York)* (East Hampton: *East Hampton Star*, 1947). Also see William S. Pelletreau, “East Hampton,” in *History of Suffolk County* (New York: W. W. Munsell & Co., 1882), especially 25-30; Robert Payne, *The Island* (New York: Harcourt, Brace, & Co., 1958); and Jason Epstein and Elizabeth Barlow, *East Hampton; A History and Guide*, rev. 3rd. ed. (New York: Random House, 1985).

3. The seventh owner, John Lyon Gardiner, conjectured that this scourge was not smallpox but a venereal disease carried by early explorers, or perhaps an unusual scarcity of food (John Lyon Gardiner, “Gardiners Island,” 261-62).

4. J. Lawrence Smith, “Smithtown,” in W. W. Munsell, *History of Suffolk County*, 2. The transaction is discussed below.

5. Curtiss C. Gardiner, *Lion Gardiner*, 46.

6. Edward Hopkins to John Winthrop, Jr., 28 October 1635, *Winthrop Papers, Collections of the Massachusetts Historical Society*, Vol. VI, 4th Series (Boston, 1863), 326-329, announcing the departure from London of the *Batcheler*, the 25-ton North Sea bark bearing "Serieant Gardener, his wife and her maid, and his workmaster to New England"; Sir Richard Saltonstall to John Winthrop, Jr., 27 February 1635 (new style 1636), *ibid.*, 579-581, asking to be commended to "Sergieant Gardiner...whom I purpose, God willing, to visit this summer, if he will prouide a house to receiue me & mine at my landing." Two letters signed "Lion Gardener," in 1652 and 1660, were endorsed "Leift. Gardiner" by John Winthrop, Jr. (*Winthrop Papers, Collections of the Massachusetts Historical Society*, Vol VII, 4th Series, 64-65.

7. Curtiss C. Gardiner, *Lion Gardiner*, xvii. In the "Pequot Warres" and in most letters in the *Winthrop Papers*, Lion spelled his last name "Gardener."

8. Lion Gardiner, "Pequot Warres," 136. English units in the Netherlands defended the Dutch Republic, a loose federation of provinces under the stadholdership of the prince of Orange, which waged a long and successful struggle for independence from Spain. See Pieter Geyl, *The Netherlands in the Seventeenth Century*, rev. and enl. ed. (New York: Barnes & Noble, 1961 [first pub. 1936 as *The Netherlands Divided*]).

9. There is an abundant body of literature on the English Revolution, and the roles of Lord Say and Sele, Lord Brooke, Sir Arthur Haselrig, George Fenwick, Hugh Peter, John Davenport, Sir Thomas Fairfax, and others encountered by Gardiner. A guide to modern interpretations, including those of Christopher Hill, R.H.Tawney, H.R.Trevor-Roper, Lawrence Stone, Perez Zagorin, and many other historians, is R. C. Richardson, *The Debate on the English Revolution* (London: Methuen & Co Ltd, 1977. A recent account of the era is Derek Hirst, *Authority and Conflict: England 1603-1658* (Cambridge: Harvard University Press, 1986).

10. Curtiss C. Gardiner, *Lion Gardiner*, 46.

11. Lion Gardiner, "Pequot Warres," 137; Richard S. Dunn, *Puritans and Yankees: The Winthrop Dynasty of New England 1630-1717* (New York: W. W. Norton, 1962), 69.

12. Lion Gardiner, "Pequot Warres," 138-39.

13. *Ibid.*, 140, 150, 151. Like Gardiner, Mason and Underhill were soldiers in the Netherlands before coming to New England. See Major John Mason, "A Brief History of the Pequot War," *Collections of the Massachusetts Historical Society*, Vol. VIII, 2nd Series (Boston, 1836): 120-153; Louis B. Mason, *The Life and Times of Major John Mason, 1600-1672* (New York: G.P.Putnam's Sons, 1935); Captain John Underhill, *Nevves from America...* (London, 1638 [facsimile reprint ed. New York: Da Capo Press, 1971]), an account of the Pequot War that justified the slaughter because sometimes "Scripture declareth women and children must perish with their parents."(40)

14. *Ibid.*, 150. Yovawan and Wyandanch resided in what is now eastern Suffolk County, the region called Paumanok. There probably was no one "Sachem of Long Island," a title that may have been a device for simplifying the transfer of land from Indian to English hands by presuming that a single sachem ruled the Island, with power to sell ancestral acreage.

15. *Ibid.*

16. DNB, 961.

17. Nathaniel S. Prime, *History of Long Island, from Its First Settlement by Europeans*,

to the Year 1845, with Special Reference to Its Ecclesiastical Concerns Part I (New York: Robert Carter, 1845), 93; Gaynell Stone, “Long Island As America: A New Look at the First Inhabitants,” *LIHJ* (Spring 1989):166. For a study of the Montauk and their treatment by English settlers, see Gaynell Stone, ed., *Readings in Long Island Archaeology & Ethnohistory*, Vol. III, rev. ed., *The History and Archaeology of the Montauk*, (Stony Brook: Suffolk County Archaeological Association, forthcoming early 1990).

18. Curtiss C. Gardiner, *Lion Gardiner*, 65. Wyandanch died in 1659. He included Lion’s son, David, as a guardian of Wiankombone, his son, who died a few years later. It was rumored that Wyandanch “died by poison, secretly administered”(ibid.).

19. John Lyon Gardiner, “Gardiners Island,” 270-271.

20. *E.H.T.R.*, 2-3. The traditional consideration of “one large black dog, one gun, a quantity of powder and shot, some rum and a few Dutch blankets (is) not well founded”(Curtiss G. Gardiner, *Lion Gardiner*, 58.

21. Ibid., 58-61.

22. Alexander Gardiner, “Gardiner Family,” 179.

23. Prime, *Long Island*, 77-78.

24. Lion Gardiner to John Winthrop, Jr., 27 April 1650, *Collections of the Massachusetts Historical Society*, Vol. VII, 4th Series, 59. For William Perkins (1558-1602) and other Puritan theologians, see Perry Miller, *Orthodoxy in New England* (Boston, 1933), *The New England Mind: From Colony to Province* (Boston: Beacon Press, 1961 [first pub. 1953]), and *Errand Into the Wilderness* (Cambridge: Belknap Press, 1956).

25. *E.H.T.R.* I:150, 13 November 1658.

26. Alexander Gardiner, “Gardiner Family,” 183-84. The charges against Goody Garlick are reported in the *E.H.T.R.*, 132-36, and 139-40.

27. Curtiss C. Gardiner. *Lion Gardiner*, 65; Thomas James to John Winthrop, Jr., 6 September 1654, *Collections of the Massachusetts Historical Society*, Vol. VII, 4th Series, 482.

28. J. Lawrence Smith, “Smithtown,” 2. The deed is recorded in the *Book of Deeds*, Vol. II, in the office of the Secretary of State, Albany, NY, 118-19. A copy is in the collection of the Brooklyn Historical Society.

29. Lion Gardiner to John Winthrop, Jr., 5 November 1660 (*The Winthrop Papers, Collections of the Massachusetts Historical Society*, Vol. VII, 4th Series, 64-65. The governor of Barbados was called “Mr. Serle” by Winthrop, “Daniell Searle” by Lion.

30. Curtiss C. Gardiner, *Lion Gardiner*, 65. Wyandanch, during “a great mortality (epidemic) among them (the Indians)...died, but it was by poison (Lion Gardiner, “Pequot Warres,” 157-58. For Wyandanch’s appointment of Lion and David Gardiner as guardians of his son, and for the purchase of 9,000 acres of Montauk land by the Gardiners and others from Wiankombone and his mother, see *Readings in Long Island Archaeology & Ethnohistory*, Vol. III, *The History & Archaeology of the Montauk* (Stony Brook: Suffolk County Archaeological Assoc., 1979):171-73

31. Lion Gardiner, “Pequot Warres,” 157.

32. Benjamin F. Thompson, *History of Long Island from Its Discovery and Settlement to the Present Time*, 3rd. ed., revised and greatly enlarged with additions and a biography of

the author by Charles Werner (New York: Robert H. Dodd, 1918), I:198, 209).

33. Robert Payne, *The Island*, 106.

34. Thompson, *History of Long Island*, III:318.

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The Gardiners and Their Island, 1937-1972

By *Richard P. Harmond*

Gardiner's Island, reportedly the largest privately-owned island in the United States, has been in the possession of one family for 350 years. Over that span the Gardiners have kept the island "out of the hands of developers and unsoiled," as Jeannette Edwards Rattray expressed it.¹ But one cannot help but be curious about the future. Will the family retain ownership or is it more likely that Gardiner's island will fall into other hands? And either way, will it remain unspoiled?

No one, of course, can say with assurance what will happen to the Gardiners and their island. But anyone mulling over these questions would do well to give some consideration to the two occasions in this century when it seemed possible that the Gardiners might be forced to surrender their island.

I

The first of these occasions occurred with the death of Lion Gardiner, twelfth Lord of the Manor, in 1936. Nine years earlier he had sold the island to his uncle, Jonathan T. Gardiner, taking a \$345,000 purchase-money mortgage (due in 1940). Lacking a direct descendant, Jonathan, at his death in 1933, bequeathed the property to a great-nephew, Winthrop Gardiner. Jonathan's will provided that at Winthrop's demise the island should pass to a son of the latter, or, if it had to be sold, should be offered for sale to a person bearing the surname of Gardiner.² Jonathan's plan, however, went somewhat awry.

Lion left the \$345,000 mortgage to Ida T. Gardiner, his widow. He also left her in something of a financial fix. Not only were heavy inheritance taxes owed to the Federal and State governments, but the principal and unpaid interest on the mortgage amounted to \$298,000 and \$32,000 respectively. A plea to the Bank of New York and Trust Company, the executor of Jonathan's estate, for a partial payment on the mortgage to meet these taxes went unheeded. Apparently seeing no other recourse, Ida and the executors instituted foreclosure proceeding against Winthrop and the Bank of New York and Trust Company.³ And in March 1937 it was announced that Gardiner's island was to be put up for sale.

With the sale pending, rumors circulated of "widespread interest" by "out-of-town parties," one of which, for example, ambitiously proposed to convert the island into an American Monte Carlo with a casino, hotel, and race track.⁴ Of greater significance, in light of later developments,

was the interest shown by local conservationists. They appreciated the historic value and, even more, the pristine condition of Gardiner's Island, and feared the possibility of development. One of their number, Robert Cushman Murphy, Lamont Curator of Birds at the Museum of Natural History in New York City, wrote that Gardiner's Island possessed groves of white oak and beeches,

to which an ax has never yet been laid... These trees are like hard-to-imagine forests that covered now bare Block Island when New England colonists first went there to convert standing timber into sea-going craft.

This island, went on Murphy,

is a famous transient and wintering-ground of water-fowl, and the breeding-site of Tern, shore-birds and many other species which would soon be gone forever from the territory if it were to be broken up into estates or house-lots. The island, is probably the world's center, for example, of the Fish Hawk. Probably twice as many pairs annually nest there as in the whole of Europe, and English naturalists, who would give their eye-teeth to reestablish a single breeding family of Osprey's [*sic*] in the British Isles, have recently transported several of these birds from Gardiner's Island to their own coasts.⁵

Murphy was determined to preserve the island's flora, as well as its role as a refuge for osprey and other bird species. Joined by his colleagues, Murphy convinced "some interested people" to take part in the auction for Gardiner's Island. If successful, their plan was to turn the island over to the Fish and Wildlife Service of the Federal Government as a game sanctuary.⁶

The auction never came off. A few weeks before it was scheduled to take place, Miss Sarah Diodati Gardiner came to the rescue. Although not of this opinion at first, she became convinced of the importance of keeping the island in the family; Sarah (a descendant of the original owner through both her mother and father) purchased it from the executors of Lion Gardiner's estate.⁷

In this unexpected fashion, the island was retained by the Gardiners, and the terms of Jonathan's will adhered to. Sarah, who died in 1953, provided for orderly inheritance. By the terms of her will, the island was to be held in trust for the benefit of her nephew, Robert David Lion Gardiner, and his sister, Alexandra (Mrs. J. Randall Creel). At their deaths it would pass to their children.⁸

II

Sarah had rescued the island for the Gardiners. What she could not have foreseen, however, was the interest displayed in the island by non-family members, and in particular by Otis Pike, a Riverhead native and member of Congress, whose district included the island. Exactly when he developed an interest in Gardiner's Island is unclear, but as early as 1966 he suggested the possibility of adding it to the Fire Island National

Seashore. That May he arranged for Stewart Udall, the Secretary of the Interior, to visit the island and, if his schedule permitted, to meet Robert David Lion Gardiner (who remarked that he had invited Udall “as a conservationist and not a predator.”)⁹

The following year the Interior Department designated the island as a natural landmark, though this title implied no authority over the island by the department. Further, when in 1969 Robert Moses wrote Walter J. Hickel, then Secretary of the Interior, about the possibility of Gardiner’s Island becoming part of the National Park System, Hickel replied that “insufficient study” had been done for him to take a position.¹⁰

There the matter rested until 1971, when Otis Pike came up with a new proposal. During the summer recess he did some fishing in Gardiner’s Bay. While bobbing about in a boat, the congressman looked over at the island and concluded that with the tremendous rise in Suffolk’s population, and the resulting pressure for development, the time had come for him to act to protect the island for future generations. According to Pike, not only the island’s historical value but also “its scenic, natural and aesthetic splendor” justified governmental action.¹¹ Whether correctly or otherwise, to Pike the choice was no longer between maintaining the island’s pristine state or making it a public park. Rather, the choice was between developing it or having a park.¹²

Consequently, in September 1971 Pike introduced a bill to establish Gardiner’s Island as a National Monument, and to place its 3,300 acres under the control of the Interior Department.¹³ The measure included other properties, especially some twelve hundred acres of Napeague Beach (in nearby East Hampton). Pike “envisioned a multiple use” of this roughly five-thousand acre “complex.... [with] no development on Gardiner’s Island” save for a marina to accommodate ferries and visiting boaters. The Napeague acreage, in Pike’s proposal, was to provide ferry and marina facilities, as well as “camping, parking, swimming and recreational areas.” Pike believed that offering such facilities at Napeague Beach was the best way of keeping campers and swimmers away from Gardiner’s Island.

In Pike’s bill, the owners of property taken by the government could choose one of three options—outright sale, “a life estate,” or twenty-five year occupancy, with outright sellers to be paid a higher price than those who stayed.¹⁴ Responding to protest against the concept of the government’s taking over private property for a park or a nature reserve, Pike observed that,

Our exploding population, particularly on eastern LI, is pushing us closer and closer together. If anyone can show me how we can preserve open space and trees and pure air and clean water in America without gov’t. action, I’ll be happy to recommend it.¹⁵

Pike’s bill generated substantial debate in Suffolk County. Among its supporters was Lee Koppelman, executive director of the Bi-County Planning Board, who termed the proposal “superb.” Pike also gained the backing of the East Hampton Town Conservation Advisory Council, the National Audubon Society, the Wilderness Society, the Suffolk County

American Legion, and Suffolk Local 107 of the International Garment Workers Union.¹⁶ On the other hand, there was considerable opposition from, among others, the East Hampton Town Chamber of Commerce, the Southampton Bayman's Association, and the State Daughters of the American Revolution.¹⁷ Also critical of the bill was a group of scientists who, as experts on the osprey, felt that extensive public use of the island under federal ownership would endanger its delicate ecology, as well as its population of ospreys.¹⁸

Again, and not surprisingly, the bill drew fire from the Gardiners. Robert David Lion Gardiner, a frequent spokesman for the family, was irritated that Pike had drafted a bill concerning Gardiner's Island without consulting the Gardiners. There was also the issue of property rights. "I certainly feel that as long as the Rockefellers can have Pocantico Hill," declared Gardiner, "we lowly Gardiners in the fourth century of ownership should be allowed to have our estate." And as others, including the experts on the osprey, Gardiner feared the impact of "hordes" of people trampling over the island, endangering the wildlife, and leaving "litter and graffiti" behind.¹⁹

Moreover, Gardiner insisted that:

Gardiner's Island does not need to be protected by Mr. Pike. It is maintained, preserved, and respected by the family who has owned it for over 300 years. Neither Mrs. Creel, her children, or my family are the least bit interested in the exploitation of our island. We do not need the money—we love our island—we will fight to keep it in the Gardiner family.²⁰

And fight he did, extending the struggle to the political arena. His acceptance of the Conservative Party nomination for Congress in 1972 pitted him against Pike, the Democratic incumbent; Joseph H. Boyd, the Republican nominee; and Robert Samek, the Liberal candidate. How many voters were swayed to vote for or against Otis Pike on the issue of Gardiner's Island is hard to say. There were other important questions, including revenue sharing. Gardiner's chances were further diminished by the endorsement of Boyd for Congress by fellow-Republican Richard Nixon, who swept to a second term by a landslide. But while Nixon was carrying Suffolk with ease, so too was Otis Pike the victor in the First Congressional District, as he had been since 1960.²¹

If Pike won the election, Robert Gardiner did not come away empty handed. In September 1973, Pike, responding to the "flack" into which his proposal had run, and sensing no groundswell supporting it, shelved his bill to establish Gardiner's Island as a National Monument.²²

III

Through the efforts of Aunt Sarah in 1937, and her nephew, Robert Gardiner, and other family members in 1972, the Gardiners kept their island. And they kept it unspoiled. But the events we have described remind us of how different the fate of the island might have been. If Aunt Sarah had decided to save her money instead of a piece of real estate back in 1937, Gardiner's Island might long ago have fallen into the hands of

developers. Or if Robert Cushman Murphy had prevailed, the Federal Government might well have taken control of the island before World War II. Or, again, if Otis Pike had his way in 1972, Gardiner's Island today would be part of Uncle Sam's domain.

Could history repeat itself? In certain respects, and with variations, it could. Thus, a family or financial crisis (the latter exacerbated by the island's rising taxes and maintenance cost) might one day force the Gardiners again to put the island up for sale. But given the public's interest in the condition and disposition of Gardiner's Island—an interest clearly heightened by the debate and political campaign in 1971-1972—it seems doubtful that the island now would be sold to a developer. Possibly, it might be acquired by some private conservation group, trust, or foundation.²³ However, another, and probably more feasible scenario was suggested by the *East Hampton Star* during the controversy over the Pike bill. Said the *Star*,

It seems likely that, in the short run, the island will be preserved as it is by its owners, and in the long run that it will indeed come under public ownership with some form of restricted access.²⁴

NOTES

I want to express my gratitude to Mr. Ward Ackerson, a veteran observer of Suffolk County real estate dealings, for sharing his knowledge of Gardiner's Island with me .

1. Jeannette Edwards Rattray, *Gardiner's Island: A Collection of Historical Highlights of the Island* (East Hampton, 1958), 7.
2. *New York Times*, 12 March 1937.
3. *East Hampton Star*, 3 June 1937.
4. *Ibid.*, 27 May and 3 June 1937.
5. *Bird-Lore* 39 (May, 1937), 245.
6. Arthur Gelb and Barbara Gelb, "Robin Hood Would Have Loved It Here," *Saturday Evening Post*, 11 October 1952, 79.
7. *East Hampton Star*, 3 June 1937.
8. *Ibid.*, 15 January 1953.
9. *Newsday*, 19 May 1966; *Long Island Press*, 19 May 1966. As it turned out, Udall neither visited the island nor met Robert Gardiner (*Newsday* 10 March 1972).
10. *New York Times*, 12 September 1971.
11. *Ibid.*; *East Hampton Star*, 18 March 1972.
12. Telephone conversation with former Representative Otis Pike, 5 May 1989.
13. *Congressional Record*, 92nd Congress, 1st Session, 117 (9 September 1971), 31176. Subsequently, the bill was co-sponsored by six other Long Island Congressmen.

14. Pike estimated the cost of the land at from \$15 to \$20 million; others went higher, with Edward F. Cook, an East Hampton realtor, guessing \$40 million (*East Hampton Star*, 16 September 1971).
15. *Long Island Commercial Review*, 14 December 1971.
16. *East Hampton Star*, 16 and 30 September 1971, 2 and 16 March 1972.
17. *Ibid.*, 16 March 1972; *Southampton Press*, 24 February 1972.
18. *New York Times*, 13 February 1972.
19. *Ibid.*, 12 September 1971; *Newsday*, 27 October 1972.
20. *East Hampton Star*, 17 February 1972.
21. *Southampton Press*, 26 October 1972; *Newsday*, 30 October 1972; *New York Times*, 30 October and 9 November 1972.
22. Telephone interview with Otis Pike, 5 May 1989; *Newsday* "Magazine," 21 October 1973, 15.
23. Robert David Lion Gardiner has talked of setting up a private foundation to administer the Island. Under such a plan, access to the Island would be limited. Interview with Robert Gardiner, 28 September 1988.
24. *East Hampton Star*, 30 March 1972.

Prosperity on the Ways: Shipbuilding in Colonial Oyster Bay, 1745-1775

By Geoffrey L. Rossano

Bounded by ocean and sound, river and bay, colonial Long Island depended heavily on water-borne commerce for trade, transportation, and communication. To meet the demand for vessels many coastal communities turned to shipbuilding. Though the annual number of ships produced was small compared with total colonial output, local yards played an important role in the regional economy.¹ East End towns like Southold and Easthampton became early centers of watercraft production. Among the most prominent Long Island construction sites was Oyster Bay harbor, about twenty-five miles east of Manhattan and directly across the Sound from Stamford, Connecticut. Though shipwrights were busy there as early as the third quarter of the seventeenth century, activity peaked in the three decades preceding the American Revolution.

During the late colonial era Oyster Bay-built vessels cruised to all corners of the Atlantic commercial world. Writing in the 1830s, the Long Island historian Benjamin F. Thompson noted that prior to the Revolution, “several brigs and smaller vessels built here (Oyster Bay)...were engaged in the European and West India trade.”² This small village, only a few dozen households in all, supported a surprising level of activity, requiring a wide range of craftsmen, laborers, and investors. Packet boats regularly carried passengers to Manhattan. Coasting sloops and schooners laden with wheat, shingles, and salt pork sailed to Boston, Quebec, Madeira, and Jamaica. Other vessels journeyed as far as London for cargoes of spices, cloth, and china, and to Central America for loads of valuable tropical dyewoods.

With its gently-sloping waterfront, well protected harbor, and convenient access to New York, Oyster Bay was a natural site for shipbuilding, which probably began a few years after the town was settled in the early 1650s. In 1681 the town meeting granted John Newman a home lot and yard for “the building of vessels and for laying his timber in.” Several other shipwrights, including Samuel Andrews (*ca.* 1663-1678), William Frost (*ca.* 1677-1695), and Samuel Pell (*ca.* 1680) practiced their trade in the same era.³

As Long Island’s population and economy expanded during the first half of the eighteenth century, the need for vessels of all kinds increased steadily. Rising volumes of trade—both in agricultural exports and in imports of tropical produce and European manufactures—demanded far greater carrying capacity, hence an increase in the number of ships plying local waters. Replacements also were needed for vessels seized by pirates

in the Caribbean or by enemy privateers during frequent wars with France and Spain. Still more ships foundered in North Atlantic gales and Caribbean hurricanes. Finally, time, hard use, and tropical Teredo worms all wreaked havoc on wooden ships.

Conditions closer to home proved equally hazardous. A tragic and unlikely fate befell a Rhode Island sloop in November 1760, off the East End of Long Island, when a whale struck the vessel. Within a few minutes, the ship sank and five crewmen died. In March 1763, a Stamford sloop returning from St. Croix with a load of rum and sugar grounded at Oyster Bay. Both vessel and cargo were lost. In July 1767, a sloop sailing out of Cow Harbor [Manhasset Bay] overset in the Sound. The ship sank and two boatmen drowned; one body later washed ashore at Lloyd Neck. Such losses, whether from human or natural causes, required a constant stream of replacement vessels.⁴

Despite its small size, mid-eighteenth-century Oyster Bay boasted many ship owners, including Samuel, Jacob, and Benjamin Townsend; David Chadeyne, a packet master; John and Richard Butler; Thomas Youngs; and, later, Jacob Townsend, Jr. and Jet McCoun. Most of their ships appear to have been locally built, resulting in a surprisingly high level of construction. The surge, which lasted for thirty years, began about 1745 after Samuel Townsend, a Jericho merchant, relocated his busy store to a harbor-side site in Oyster Bay. This simple move energized the regional economy, as during the next five years Townsend commissioned three new trading vessels, the sloops *Prosperity*, *Solomon*, and *Sarah*.⁵

A surviving manuscript account book (ca. 1760) of the local blacksmith, George Weekes, provides further proof of considerable maritime activity, mentioning at least ten ships. Similarly, the schoolmaster, Zachariah Weekes, recorded the movements of many local vessels in his (unpublished) diary, including "Thomas Youngs' sloop," "Captain Butler's schooner," and "David Chadeyne's sloop." A careful observer of the waterfront scene, Weekes described the construction of three new ships in 1758 alone—a large brig "of many tons burthen I cannot tell, tho' she is pretty large," a snow (a large, two-masted, ocean-going trading vessel), and "Captain Townsend's sloop." It is likely that local yards produced at least one or two vessels each year throughout the pre-Revolutionary period.⁶

Oyster Bay shipwrights built a variety of water craft, from small open fishing boats to large snows. Most common were single-masted, single-decked coasting sloops averaging twenty-five to fifty tons. Typically forty-five to fifty feet in length, with a twenty-foot beam and an eight-foot hold, they were generally gaff-rigged, carrying a square topsail and mounting a long bowsprit and jib-boom.⁸

Two-masted vessels also proved to be popular with local merchants and mariners. Oyster Bay's Butler family preferred fore-and-aft rigged schooners, while the successful trader, Samuel Townsend, employed square-rigged brigs such as his *Audrey* (1758) and *Sally* (1768). Brigs and schooners were longer, wider, and heavier than sloops, with deeper holds and greater cargo capacity. Largest of all Oyster Bay-produced vessels were

the snows, the preferred type for trans-oceanic transport. Large or small, colonial vessels often were fitted with gun ports and frequently carried heavy armament. When she traveled to the Bay of Honduras in 1750, Townsend's *Solomon* mounted at least six cannon.⁸

During the late colonial era most construction was covered by elaborate contracts negotiated between owners and shipwrights. Such documents described the dimensions and layout of the proposed vessel, the exact materials to be used, the price, the quality of workmanship expected, and the division of responsibility between the contracting parties. Builders commonly charged twenty or twenty-five English pounds per ton, so that new vessels cost from 900 to 2,000 pounds, depending on size and outfit. Though some agreements were rather informal, others were extremely detailed and covered most eventualities.

While surviving contracts for Long Island vessels are scarce, similar documents from other shipbuilding regions illustrate these points. A 1746 contract for a brigantine to be built at Portsmouth, New Hampshire, specified that the shipwright "do all caulkers work, and find and provide mast, boom, and bowsprit, provide seasonably all iron work, pitch, tar, oakum, joiners work, necessary rope, anchors, and cables." A 1733 document for a Bristol, Rhode Island, vessel included stipulations for "eleven flat timbers not to vary in ye least... of good white oak...no less scarf (spliced) than four feet at least...all ye planks both within and without to be free from sap...we would have her be built a 'floaty' ship."

Resources to finance new construction were drawn from many sources. Local merchants like Samuel Townsend reinvested trading profits as well as money from relatives and loans from neighbors. Ship owners frequently entered into partnerships, sometimes with captains or businessmen in Manhattan. While payments might be in cash or negotiable bills of exchange, currency-starved American owners also covered expenses with "West India Goods" (rum, sugar, molasses); "English Goods" (spices, cloth, china, manufactures); and local provisions, including pork, wheat, and corn. This applied to Oyster Bay, where Samuel Townsend utilized a combination of cash and merchandise, paying a carpenter—who earned three pounds, three shillings, for forty-two days work—with such general store goods as "coating," molasses, powder and shot, oznabrig [an inexpensive, coarsely-woven linen cloth], "old shoes, old britches," and stockings. Virtually all workers in Oyster Bay yards received a portion of their wages in rum or brandy.¹⁰

The exacting task of building a seagoing vessel required a wide range of skilled craftsmen, including experienced shipwrights, joiners, smiths, and riggers. The man most responsible for success or failure was the master shipwright, often self-trained. Few new craft were designed in advance, and builders usually relied on a long tradition of local practices. In Oyster Bay, the shipwrights Job Weekes, James Wooden, and a "Mr. Morrell" were known for the fine vessels they produced, and could earn as much as one hundred pounds a ship, a considerable sum in that era. They were assisted by one or more skilled carpenters. Reflecting the mixed ethnic

and racial composition of the community, Oyster Bay ship carpenters included Indian John Rumpas and at least one slave.¹¹

Actual construction began after the master builder selected a good launching site, where the land sloped gently seaward so that shipways could be erected with a minimum of digging and blocking. Water of sufficient depth also was required, to prevent the completed vessel from grounding as it slid into the harbor. Workers first placed large timbers along the shore, surmounted by hardwood keel blocks. This frame, in turn, supported the keel, a massive wooden backbone nearly a foot square, scarfed (spliced) together in sections and joined by heavy iron bolts. The keel was followed by the curved stem and sternposts, held in place by stout wooden knees. Most of the timber used in Oyster Bay yards probably came from nearby sawmills, especially at Cold Spring (the present Cold Spring Harbor), though some lumber was brought from Manhattan. An account book kept by the owners of the sloop *Prosperity* recorded numerous charges for carting boards and planks. Oak, pine, and perhaps chestnut were the preferred woods, with oak used for structural elements and pine for planking and decking.

With the keel resting on the blocks and the fore and aft timbers raised, the floors (base of ship's ribs) were set perpendicularly across the keel and locked in place with a longitudinal keelson (interior keel). Then came the task of raising the many parts of frames which formed the skeleton of the vessel, planking the exterior, and installing a series of interior planks called, oddly enough, the ceiling. In early Oyster Bay yards some of the curved planks which covered the hull were sawn or adzed to fit; by the 1740s the steam box had come into general use, easing the process considerably. Exterior planks were fastened with wooden pegs called trunnels, then fared (smoothed) with a shipbuilder's adze and finished with hand planes. As the exterior planking proceeded, so did the process of laying the deck.

Finally, the hull was made watertight, a procedure known as caulking. When the ship's frame was enclosed, spaces were left between the exterior planks which allowed the timbers to expand and contract. These openings were caulked (filled) with oakum made by soaking strands of old rope in tar and driven home with special irons and mallets. After caulking, the entire hull might be coated with a waterproof and predator-proof covering like tallow, tar, and white lead.

The tools used to construct Oyster Bay vessels were necessarily unsophisticated. Large, heavy timbers were squared by hand with a broadaxe and adze. Much of the planking was mill-sawn locally, but trimmed to fit with hand-powered frame and pit saws. Boring was accomplished with pod augers, while smoothing was done with simple hand planes. Despite their uncomplicated tools, skilled Oyster Bay craftsmen produced excellent vessels.¹²

When the vessel's main form was completed, work began on the numerous details and secondary structures which transformed an empty hull into a finished ship: bulkheads, hatches, gunports, windlass and

captain, cabin, roundhouse, and all the interior furnishing and fittings. Most of the fine woodwork was contracted to crews of joiners. James Whippo, an Oyster Bay resident and a neighbor of Samuel Townsend, worked on several local vessels. A skilled cabinet maker and house carpenter as well as a ship's joiner, Whippo's pay of four shillings per day compared very favorably with typical carpenter's wages of one and a half shillings. Oyster Bay yards also employed roving gangs of joiners who moved from town to town in search of work. Such men normally boarded locally, at the shipbuilder's expense, during their period of employment.¹³

The quantity of iron used in building a ship often determined its quality, so that talented smiths played important roles in the construction process. During the 1740s, the forge of the Cold Spring iron-master, William Hawxhurst, supplied raw material for Samuel Townsend's first vessels. Pig iron, brought from New York aboard packet boats and hauled to the forge by ox cart, was transformed into more malleable wrought iron suitable for shipboard use. Further work was completed at the launching site, where smiths like Oyster Bay's Samuel Fosdick, or the itinerant John Steal, erected temporary forges and manufactured great quantities of spikes, bolts, nails, chain plates, cabin hinges, rudder hardware, tiller plates, strap blocks, pump hardware, and other necessary items.¹⁴

Following Hawxhurst's relocation to Manhattan and then to Orange County, New York, in the early 1750s, much of the local iron work fell to George Weekes, the Oyster Bay blacksmith. Between 1755 and 1768 he produced material for at least a dozen vessels, including John Butler's *Charming Patsy* and *John and Richard*; a new sloop for Jacob Townsend; and a packet sloop for David Chadeyne. A typical vessel consumed anywhere from 1,100 to 3,000 pounds of iron. Weekes also maintained a steady business repairing older ships. His 1762 account-book entries include repairs to a caulking iron for carpenter James Wooden, and the replacement of parts for a pump, rudder, and tiller aboard John Butler's schooner *Sary Ann*. On another occasion Weekes mended a chain plate and the hinge for a cabin door for the packet boat captain, David Chadeyne.¹⁵

The last group of specialized workers to enter the shipbuilding process were the riggers, the men responsible for raising the mast(s) and mounting the spars and bowsprit. They installed great lengths of tarred standing rigging to brace the structure and resist the tremendous stresses of winds and tide. This dangerous work, frequently performed high above the deck, required steady nerves and excellent balance. During one of his walks along the waterfront in 1758, schoolmaster Zachariah Weekes learned that "a man, one of the riggers, fell from the top of the snow's mast to the deck, tho' he broke off the fall by catching hold of a rope which cut his hands to the bone and hurt him very much."¹⁶

After six to twelve months on the stocks, a colonial vessel was usually ready for launching. With her bottom coated with tallow, the ship's keel blocks were knocked loose and, if all went well, she slid into the harbor

and the task of final outfitting began. New vessels required a long list of supplies. The outfit for a local sloop, launched in 1747, included a load of ballast stone, canvas sails, anchors, anchor chains and cable, a rowboat and oars, spare line, water barrels and casks, tar, turpentine, twine, paint, iron cooking pots, pewter plates and wooden dishes, candles, baskets, and bedding. Following launching and final rigging, ships journeyed to New York harbor to be registered at the Customs House, prior to their first voyage.¹⁷

While many of Oyster Bay's earlier vessels remain anonymous, or known only by name and/or owner, a few better-documented ships reveal a great deal about the nature of Long Island's colonial maritime trade. The packet captain, David Chadeyne, contracted for several small sloops employed on his weekly run to Manhattan and back. He carried passengers, European imports, farm produce, mail and newspapers, even a winning lottery ticket for schoolmaster Weekes. Similarly Jet McCoun, Jacob Townsend, Jr., and Thomas Youngs skippered packet boats on Long Island Sound.¹⁸

The brothers John and Richard Butler owned a series of coasting schooners which sailed from Boston to New York, stopping along the way at ports in Rhode Island, Connecticut, and Long Island. Best documented of all Oyster Bay-built ships were the trading vessels of Samuel Townsend, the merchant. His first, the sloop *Prosperity*, was launched in 1747 and carried Long Island foodstuffs and timber to Madeira and the West Indies. A second sloop, named *Solomon* after his eldest child, completed fourteen trips to the distant Bay of Honduras, dodging pirates, privateers, hurricanes, and tropical fevers in search of valuable dyewoods. Still another sloop, the *Sarah*, coasted from New York to Newport and Boston.

Townsend's next vessel, the brigantine *Audrey*, launched in 1758, carried passengers, foodstuffs, and imported manufactures to Canada, the Canary Islands, and London. In 1760 she was seized by a French privateer operating out of Bayonne, on the Bay of Biscay. Townsend's last ship, the brig *Sally*, commenced her career in 1768 by cruising to London, and then on to Dublin, Jamaica, Canada, the Azores, Portugal, and North Carolina.¹⁹

The outbreak of the Revolution in 1775 dealt a grave blow to the local shipbuilding industry. During the war that followed, British security measures, together with rationing of commodities, sharply reduced the volume of trade passing through the harbor. Whaleboat raids by Continental forces stationed across the Sound in Connecticut, the attacks of American privateers, and assaults against Long Island by both patriot and French forces crippled Oyster Bay commerce.

The postwar years witnessed little improvement. A deep depression gripped northern ports. With the breakup of old trading networks, expulsion of Loyalist merchants, and loss of valuable markets in the West Indies, the demand for locally-built vessels plummeted. A few packet boats captained by Jacob Townsend, Jr. and David Chadeyne, Jr. continued to ply local waters, but overseas commerce was sharply curtailed. The aging

merchant, Samuel Townsend, who had sparked Oyster Bay's maritime construction boom in the 1740s, now was largely retired from shipping endeavors. No one appeared to take his place.

In later years a reborn national economy and the development of new markets and products revived Long Island's sea-faring industries. Cold Spring Harbor, Northport, Port Jefferson, Greenport, Sag Harbor, and other sites flourished, supplying coasting schooners, fishing boats, and whaling vessels. But for Oyster Bay, the great age of shipbuilding was the thirty-year span of the late colonial era.

NOTES

1. New England shipyards supplied an estimated two-thirds of the colonies' total output in 1771 (E.B. Greene, *The Revolutionary Generation, 1763-1790* [New York, 1943], 43).

2. Benjamin F. Thompson, *History of Long Island; Containing An Account of the Discovery and Settlement; with Other Important and Interesting Matters to the Present Time*, 3 vols. (New York: E. French Publishing Co., 1839), III, 429-430.

3. Dean Failey, *Long Island Is My Nation* (Setauket: Society for the Preservation of Long Island Antiquities, 1976), 222, 236, 251; John Cox, ed., *Oyster Bay Town Records, I* (New York: Tobias Wright, 1916-).

4. *Pennsylvania Gazette*, 27 November 1760, 31 March 1763, 6 August 1767; Henry Lloyd to William Coddington, 2 December 1727, Henry Lloyd to John Conkling, 10 May 1748, and Hugh Vans to Henry Lloyd, 24 March 1749, all in Dorothy Bark, ed., *Papers of the Lloyd Family* (New York: New York Historical Society, 1927); Marshal Smelser and William Davison, "Longevity of Colonial Ships," *American Neptune* XXXIII (1973), 16-19; Daniel Smith, "A Note on the Longevity of Colonial Ships," *Ibid.*, XXXIV (1974): 68-69; Jacob Price, "A Note on the Value of Colonial Exports of Shipping," *Journal of Economic History* XXXVI (1976):702-724.

5. Manuscript "Prosperity Account Book," 1746-1754; typescript Zachariah Weekes "Diary," 24 February 1758, 4 March 1758, 16 March 1758; manuscript "George Weekes Account Book, 1758-1767," all at Raynham Hall Museum, Oyster Bay; Field Horne, ed., *The Diary of Mary Cooper* (Oyster Bay: Oyster Bay Historical Society, 1981), entries for 15 May 1771, 29 August and 15 October 1772.

6. Zachariah Weekes "Diary," 27 March 1758, 22 June 1758, 8 August 1758; George Weekes "Account Book," *passim*.

7. Joseph Goldenberg, *Shipbuilding in Colonial America* (Charlottesville: University of Virginia Press, 1976); Howard Chappelle, "The Colonial Sloop *Mediator*," *American Neptune* XIII (1753), 177-184.

8. Weekes Account Book; Weekes Diary, 13 July 1758; *New York Gazette and Weekly Postboy*, 1758-1761; Naval Office Lists for New York (London: Public Records Office), CO 1223-1229.

9. L.W. Jenkins, "Contract to Build a Brig," *American Neptune* V (1945), 243; Kenneth Roberts, "Contract for a Vessel Built in Kennebunkport in 1773," *Ibid.* XIV (1954), 273; William Gwyn, "Shipbuilding for the Royal Navy in Colonial New England," *Ibid.*, XLVIII (1988), 22-30; *Collections of the Rhode Island Historical Society* XXXV, 145-150.

10. "Prosperity Account Book."

11. Weekes "Account Book"; "*Prosperity* Account Book."
12. William Baker, "Vessel Types in Colonial Massachusetts," in Frederick Allis and Philip Smith, eds., *Seafaring in Colonial Massachusetts* (Boston: Colonial Society of Massachusetts, 1980), 3-29; William Baker, "American Colonial Shipbuilding," *Log of Mystic Seaport* XXVIII (1976), 34-44; John Leavitt, "Shipbuilding in Colonial Connecticut," *Ibid.*, XXVI (1974), 17-26.
13. "*Prosperity* Account Book."
14. *Ibid.*
15. Weekes "Account Book"; "*Prosperity* Account Book."
16. Weekes "Diary," 1 June 1758.
17. "*Prosperity* Account Book."
18. Weekes "Diary," 24 February 1758, 2 March 1758, 16 March 1758, 20 April 1758; Horne, ed., *Mary Cooper Diary*, 15 May 1771, 29 August 1772, 23 August 1773.
19. Effingham Lawrence to Samuel Townsend, 26 February 1757, 28 September 1759; Solomon Townsend to Samuel Townsend, 14 April 1770, 15 June 1771, 4 May 1771; manuscript "*Sally* Account Book," all in Townsend Family Papers, New York Historical Society. See also "Log of Brig *Sally*," at G. W. Blunt Library, Mystic Seaport Museum; also Weekes "Account Book," "*Prosperity* Account Book," and Solomon Townsend manuscript "Account Book 1768-1773," at Raynham Hall Museum. Equally informative are shipping notices in *New York Mercury*, *New York Gazette* and *Weekly Postboy*, and *Philadelphia Gazette*.

Shinnecock and Montauk Whalemen

By John Strong

The original spelling is preserved in all the quotations in this article.

The role of Native Americans in the great saga of North American whaling has been touched upon briefly by a few historians, but none has attempted to find out their names or describe their special experiences. Although it has been duly noted that Shinnecock and Montauk men took part in the industry from its inception in seventeenth-century shore whaling through the more glamorous period of long distance expeditions, the references have generally been in the form of colorful anecdotes. Even Edwards and Rattray's classic *Whale off: The Study of American Shore Whaling*,¹ treats the Native American whaler as a faceless presence in the background.

Long before English settlers arrived, the Shinnecock and Montauk people had harvested carcasses of beached "drift" whales and hunted the exhausted and disoriented creatures which often were trapped in the bays and shallow waters. There are no accounts of whale hunting by the Shinnecock, but a local historian wrote a vivid description of their sacred ceremonies that centered around the fin and tail:

The most savory sacrifice made to their great deity was the tail or fin of the whale, which they roasted. The leviathan from which it was taken was at times found upon the sea shore, and a prolonged pow-pow, or religious festival was held. At these festivals great efforts were supposed to be necessary to keep the evil one without the charmed circle of their incantations. His presence, it was supposed, would defeat the pow-pow in the procurement of the favor and particular regard of the good deity. Violent gesticulations, horrid yells, and laborious movements of the limbs and body, with distortions of the features, were continued until the excitement produced madness. When the evil spirit was supposed to be subjugated, the dance and the feast commenced.²

This rather lurid description reflects the ethnocentric biases of the observer, but it indicates the whale's importance in Shinnecock and Montauk ceremonialism. On Martha's Vineyard, the whale was considered the "gift of Moshup," a legendary culture hero who sent whales ashore to feed his people.³

The origins of shore whaling practices along the New England coast remain obscure, but it seems likely that the Indians adapted some of the techniques used by the Basque fisherman who hunted off the Atlantic coast in the sixteenth century. There is little documentation, but it is known

that these Basques traded for furs with coastal Indians.⁴ Basque whalers establish base-camps along the shore, resulting in cultural exchange which played a role in the evolution of aboriginal whale hunting.

The development of shore whaling was greatly facilitated by the nature of the right whale, which frequented the waters near the southern coast of Long Island from November until April. It was called the "right" whale because the unfortunate creature was such an easy prey for hunters in small boats. The right whale is a surface feeder, spending much of its time close to shore consuming plankton. As if inviting pursuit, it swims very slowly and makes shallow dives for a maximum of twenty minutes. Even in death it is accommodating, its carcass remaining buoyant for a considerable length of time, enabling hunters to tow it to shore.

The English settlers quickly recognized the economic importance of the whales. Adult right whales average fifty feet in length, weigh about one hundred tons, and will produce nearly fifty barrels of the high-quality oil that was in great demand for lamps and as a lubricant for leather working.⁵ Profits from whale oil were a major source of eastern Long Island's capital during the seventeenth century; private debts as well as the salaries of ministers and school teachers frequently were paid in whale oil. Within four years of their arrival, the Southampton settlers had established a cooperative community enterprise that turned drift whales into their first cash crop, with profits shared by the town and the individuals who contributed labor.⁶ The townsfolk divided into squads which were responsible for keeping watch on the beaches, cutting up the drift whales, and carting them off to the trying stations where blubber was boiled down to oil. Anyone who neglected this duty was fined by the town clerk. The economic importance of drift whales was demonstrated in deeds involving beach areas, in which rights to carcasses carefully were spelled out.

Oil and whale bone profits encouraged the settlers to organize whaling companies. John Ogden, of Southampton, was granted the first whaling license on record in 1650,⁷ and may have pioneered the use of Native American crews—there were few, if any, experienced whalers among the whites. However, since no contracts were recorded for another 18 years, it is impossible to determine when Indians first took part in commercial whaling. In December 1670, John Cooper, also from Southampton, was "said to be... one of ye first that brought ye Indians to be serviceable in that design..."⁸

Pre-settlement tools and techniques of the whale hunt were related to the Indians' limited needs for meat. The English wanted a more efficient and systematic method to harvest as many whales as possible for the inexhaustible whale oil market. The answer was to combine Indian talent with European technology. The companies supplied Indian workers with iron harpoons and open, double-ended cedar boats, nearly thirty feet long and eight feet wide, designed for speed and maneuverability. Two boats were generally used, each carrying a six-man crew of four oarsmen, a steersman, and a harpooner.⁹

The attack on the whale involved considerable skill and courage. Boats

had to be steered within 15 feet of the whale to give harpooners a chance to drive their weapons deep enough into the body. Standing in the prow, with one leg braced into a notch carved for this purpose, the harpooner had to gauge the pitching motion of the sea and throw his shaft, with line attached, into a moving target. The harpoon had a razor-sharp point with multiple barbs jutting out just below the tip.

Once the lines were set and the whale's movements slowed, the long-shafted, iron-pointed lances were cast. Harpooners had to have strength, balance, and fast reflexes to throw these heavy missiles with force and accuracy into a stricken animal turning and twisting in the waves. If the lances hit a vital spot, the hunt could be over in an hour or so, but it was not unusual for the struggle to last for a half a day. The hunt was a risky business. A man who fell into the winter ocean had little chance of survival unless he was pulled out immediately.

The next stage was not as risky but very demanding. After the kill, the long, exhausting process of towing the carcass ashore began. Whales were towed in at high tide, tail first, and pulled up on the beach as far as possible. An anchor was attached to the lip to keep the carcass from moving with the pull of the falling tide. Once the carcass was exposed on drying tidal flats, the process of butchering started. The head was severed with axes and boat spades that looked like shovels with blades pounded flat and sharpened. The jaw bone—the only skeletal part with significant commercial value—was then removed from the skull and the crew began the messy work on the carcass.

Blubber was cut into strips and pulled off with a hawser and tackle; with this important exception, the butchering techniques were similar to those used by aboriginal whalers.¹⁰ As soon as the blubber strips were cut free, they were loaded on carts and taken to the tryworks. When the tide came in and lifted the carcass, the men took the opportunity to shift the body and continue their work. Even with the help of the tide and the tackle, the task of shifting a seventy-to-eighty-ton body was a challenging ordeal. In the case of larger whales, it could take two or three days.

As soon as the blubber was delivered to the trying stations, the strips were cut in small pieces and loaded into huge, 250-gallon kettles.¹¹ A crude stone furnace under the kettles boiled the oil free of the blubber. The scraps of whale flesh were skimmed out and used as fuel for the fire. As the kettles filled, the oil was bailed out and poured into cooling vats until the temperature was low enough for it to be transferred to barrels. Each boat crew took six-hour shifts until the job was finished. An average-sized whale could keep two crews working for a week. The smell from these tryworks was so offensive that the local towns passed legislation requiring that stations be far from the nearest village.

Contracting with Indian whalers began in 1668. Previously, informal arrangements apparently were made between Indian crews and white entrepreneurs. The bargaining power of the Indians was demonstrated by the willingness of the authorities to approve payment in gunpowder. Colonial laws restricted or prohibited the sale of powder and shot, to

prevent the Indians from building up an arsenal which might be used against the settlers, but in 1668, John Cooper was granted permission to give his whalers gunpowder because "... the designe of killing of whales and making oil... is work tending to public good and deserves encouragement"¹²

Competition for experienced hands soon led to abuses of agreements. Customarily, whalers were hired and given part of their pay several months in advance of the season. As November neared, companies which had not filled their crews often made attractive offers to Indians who had agreed to work for someone else. In December 1670 John Cooper petitioned again, this time for legislation to discourage companies from meddling with their rivals' agreements with Indians. The Colonial Council responded with an order prohibiting Indians under contract to Cooper from hiring out to other concerns.¹³ This sort of conflict probably led to the practice of entering contracts in town records. The process of signing documents, duly witnessed, invoked the town court's authority over the contracts. The new system did not end abuses, but limited them to a more acceptable level.

A document signed November 15, 1670 called for two Indians, Towsacom and Phillip, to work three seasons for Josiah Loughton, their pay for the three years' of hunting, butchering, and trying out oil to be three Indian coats, one pair of shoes, one pair of stockings, three pounds of shot, a half pound of powder, and a bushel of Indian corn for each season.¹⁴ Three similar contracts were recorded during the next eighteen months. Whaling companies in 1687 averaged 150 barrels a season, enough to buy three farms at the estimated prices of the day.¹⁵ The Native Americans, who took all the risks on the open water and did all the heavy work on shore, shared very little of the profits.

Competition for Indian whalers, which led to Cooper's exemption from gunpowder laws, also prompted exemption for whaling firms from laws prohibiting the sale of alcohol to Indians. Although these laws were enforced throughout the colonies, the Governor's order granted exemption to "... such persons who employ Indians in their whaling design ..."¹⁶

The Indians responded to the exploitative system by organizing their own concerns. The Shinnecock, first to challenge white-owned companies, used the standard language of contracts to describe their "whale design":

Know all men by these presents that we the underwritten being joynd in a company for this ensuing season to go to sea for the killing and procuring of the whales and other great fish do by these presents bind ourselves joyntly and severally in our own persons that god permitting... will attend all opportunity to go to sea for the procurement of [word illegible] and to cut out and ... to save what shall ... be gotten by us ... we have here unto set our hands this 24th day of November ...¹⁷

The document is undated, but its position in the archives indicates that it was entered between 1671 and 1674. Twenty Indians signed it and it was witnessed by Benjamin Smith and Jonathan Morehouse. The names

included several experienced whalers, whose signatures appear frequently on deeds and whaling contracts. Two of these men, Artor from Shinnecock and Papasequin from Montauk, appear to have been influential in their communities.

Papasequin, a leader of a Montauk faction, traveled to Rhode Island in 1669 to establish close ties with Ninigret, a Niantic sachem known to be hostile to encroaching English settlements.¹⁸ The plan was foiled by the East Hampton settlers, who quickly disarmed the Montauks and threw their support to Poniute, a Montauk who led an accommodationist faction. Poniute sent a message to Governor Francis Lovelace stating that the Montauk did "...utterly disclaime any such vassalage as Ninicraft (Ninigret) did declare..."¹⁹ This may have been why Papasequin left Montauk to join his relatives at Shinnecock, but his involvement in the attempt to establish an independent whaling company suggests that losing to Poniute had not broken his spirit. Papasequin's move from Montauk to Shinnecock was not uncommon, since the practice of exogamy insured a network of ties between neighboring groups. Not much is known about the nature of kinship systems on eastern Long Island; there may have been such a relationship between Papasequin and Artor, because they often worked together during this period.

Uncertainty about the dates of the Shinnecock whaling contract prevent a determination of whether the company was in operation between 1671 and 1675, was established for the 1674 season, or was never implemented at all. It is known, however, that by 1675 several Indian signers had returned to the employ of the English companies. That April, Artor and two other members of the defunct Shinnecock company, Johnaquam and Jackanapes, signed for the next two seasons with Richard Howell and Joseph Raynor, of Southampton.²⁰ The crew appears to have been led by John Aquam (Johnnaquam) and Judas, who are named in the body of the contract whereas the others—Jackanapes, Stowot, Tokomomo, and Artor—appear only as signatures at the bottom.

The Howell family was among the small group of settlers who founded Southampton in 1640. Edward Howell Sr. and his three eldest sons, John, Richard, and Edward Jr. were introduced to the whaling business as early as 1653, when they were assigned to the squads of townsmen who cut up the drift whales and tried out the blubber. This had been a community enterprise, organized and supervised by town officials, with participants receiving shares of the profits. It was the success of this enterprise that encouraged individuals to form private whaling companies.

In 1675, a change in procedure benefited the owners. From then on, contracts called for Indians to receive one-half share of the blubber. Local records do not describe the share system, but it was recorded on Nantucket, where shore whaling was established during the last decades of the

seventeenth century,²¹ nearly fifty years after it began on eastern Long Island. Because experienced whalers from Long Island were recruited to help develop the business, it may be assumed that the Nantucket share or "lay" system resembled Long Island's. On Nantucket, half of the profits was divided among the crew; if there were two six-man boats, for example, and if shares were divided equally, each man got one-twelfth of the half-share. One study concludes that harpooners and steersmen were paid more than oarsmen, but another cautions that not enough evidence has been found to verify this assumption.²² We have found no reference to status differentials on Long Island, but possibly they existed between the relatively unskilled oarsmen and the highly skilled harpooners and steersmen. The issue will not be settled until we develop a larger data base.

Another unresolved question is the nature of payments to Indian whalers. They were probably not paid in cash, but we have no records of transactions. The shift to payments based on shares introduced them to a modified currency system. Shares could be exchanged at any time for goods or payment of debt. It appears that Indians frequently acquired goods on credit upon signing a contract. When the season was completed, the price of these goods was deducted from the gross value of the shares, along with lost or damaged harpoons, oars, and boats.²³ Although little is known about the specific system of payments, the Indians probably ended each season in debt.

In 1676 the Unkechaug Indians, who lived west of the Shinnecock, also attempted to set up a whaling company. They owned their own boats and wanted the same license granted to white-owned companies. Their earlier expeditions had met with harassment from settlers, who took wounded whales away from them. When the Unkechaug appealed to Governor Edmund Andros for help, he investigated their complaints, found them valid, and granted their license, ordering English settlers to "... take notice and sufer the said Indians to do so without any manner of let or hinderance or molestation..." The Unkechaugs were particularly unhappy with the lay system of payment. They asked for and were given the right to "...dispose of their oil as they think good..."²⁴ Apparently they wanted to market their oil to the highest bidder, but their efforts for equal status fared no better than the earlier venture formed by the Shinnecock. No further mention of the company appears in colonial records.

In the middle of the second season, Artor signed on again with Howell but none of the crew from the previous year went with him. Howell also had formed a new association, with Joseph Fordham, another Southampton resident. This two-year contract lists twelve men, including Artor and three other members of the Shinnecock company, Jerimy, Anthony, and Pinis. The agreement gave the Indians one half-share of the blubber, but empowered the owners to fine any Indian who failed "... to go to sea when the major part doth go..." The Indians also were expected to strip off the blubber from carcasses after they towed the whales ashore.²⁵

Long-term agreements, negotiated at the end of one season in April to

take effect the following fall, were alien to aboriginal culture. When their goods were used up or their cash was spent, Indians often were open for a new deal. As we have seen, rival companies exploited this cultural difference, sometimes with a bonus to a whaler who broke his prior contract. The paper network curtailed these abuses, but the cultural gap between owners and Indian whalers encouraged manipulation.

Artor and Papasequin may have viewed such an advance as a gift exchange, not a long-range contract. In November 1676, one month before the contract went into effect, they were named in a breach of contract complaint. Artor and Papasequin apparently had entered into a second contract with a rival company owned by John Cooper. When he died, in 1677, he left his estate to his wife, Sarah, who tried to keep the company going.²⁶ That November, Sarah complained to Governor Andros that Artor and seven other Indians (Jeffrey, Joseph, Plimmy, Papasequin, Omagunsios, Obadiah and one illegible name) had broken a contract for which they had received payment, and were going to sea for another concern. The season already had begun and Sarah pleaded for relief. When none came, she appealed again in December, but there is no record of any action taken by Andros.

A week after the widow Cooper's second appeal, Artor was called before constable Joseph Raynor to testify that he was bound to Richard Howell and Joseph Fordham for the 1677-79 seasons. An addendum affirming this was jotted in the margin of the 1677 contract. Several other Indians, not mentioned in the widow's complaint, were called on the same day to confirm their obligation to work for Howell and Fordham. These men, Nasamem, Wompanaromps, Smith, Tohenoos, Joseph, Harry, Robin Johnapposot, and Noodr, may also have signed with rival owners. No other complaints or contracts for that season bear any of these names, but it is possible that informal agreements with other companies were made.

Howell and Fordham had an extra advantage over Sarah Cooper; Howell's former partner, Joseph Raynor, was the constable. That may be why Mrs. Cooper complained to the Governor, but unless the matter was extremely serious, any appeal over the heads of the local authorities had a minimal chance of success on Long Island's east end. The towns were linked with Connecticut until the English conquered New Netherland in 1664. They had accepted incorporation into the colony of New York with great reluctance and jealously guarded their local autonomy. It is likely, therefore, that Artor and his crew went to sea for Howell's company.

It is possible that there was an out-of-court settlement with Sarah Cooper, in which she released her claim in return for compensation for her payments to the Indians. If that was the case, Artor's debt to Sarah Cooper may have been taken over by Joseph Fordham. This practice, another variation of the paper network, was sometimes used by owners who needed laborers; an Indian would be indentured until the debt was paid off.

In his study of Indian labor on Nantucket, Edward Byers ²⁷ concludes that the use of fines and credit to force Indians into the white economy as unskilled workers was a common practice. The data from Long Island indicate a similar pattern. The relationship between the money owed and the work required of the Indian was probably determined arbitrarily by the white establishment. By the end of 1679, Artor was in debt to Joseph Fordham “for a considerable sum,” but the nature and origin of the debt are not mentioned in the records. For the 1679-80 season, Artor and Papasequin signed a one-year contract with a third company, owned by Richard Howell’s brother Edward. The contract commits the Indians to “...go to the sea to kill whales for Edward Howell... during all the whale season; and to also ingage to cut out all such whales as they shall kill...” Howell was obliged to “...find the afforesaid Indians sufficient craft, and to cart all such whales and fish as they shall cut out as far as Sagaponack...”²⁸ Sagaponack was the station where blubber was boiled down to oil. The contract is unusual because it makes no mention of pay for the whalers. We can only assume that they received the standard half-share to divide among them.

It is possible that the contract never went into effect, because both Artor and Papasequin signed with other people before the season began. On December 10, 1679, Artor signed an indenture with Joseph Fordham, to pay off his debt. The arrangement appears closer to a bond servant indenture than to a whaling contract:

...I Artor Indian belonging to Shenecock... being indebted to Joseph Fordham of ye said Southampton, a considerable sum of money upon ye (word unclear) of whaling expended by him. I not knowing how to make satisfaction for the said debt, Do faithfully to go to sea a whaling for the said Fordham, for time to time and year to year, attending all opportunities every whale season of going to sea, for the procuring of whales or other great fish... untill I have fully satisfied and paid the said debt...²⁹

The amount of the debt is not mentioned, perhaps reflecting Artor’s lack of understanding of the intricacies of the English legal system; the indefinite wording could certainly work to Joseph Fordham’s advantage.

We do not know how long Artor worked for Fordham. His name does not appear on any extant whaling contract after 1679. He may have continued working for Fordham until he retired or turned to some other occupation. He still lived at Shinnecock in 1698, when a town census listed him among “Indian males that are upwards of fifteen years...”³⁰ Artor last appears in the records on August 21, 1703, when he was called in with twenty other Shinnecock men to confirm the sale of their ancestral lands to the settlers.

Papasequin appears to have returned to Montauk in spite of his contract with Edward Howell. In April 1679, he signed with an East Hampton

company owned by Jacob Schellinger. The contract obligated Papasequin and six other Indians—John Eacoms, Skanderbags, Weompes, Jeorgkee, George, and Unquonomak—to:

...bee readie at or before ye fifteenth of November next to goe to sea to kill whales & to...continue in ye aforementioned their employment from season to season soe long as we shall bee indebted unto or said owners or implyers uppon their fitting us for this designe we each of us bind or selves in ye sum of Ten pound sterling for him yt shall faile in performing according to this engagement...and to allow unto us ye underwritten the halfe of all profit that we shall abtaine with their said boates and crafte during this Ingagement and to Cart ye same six myles East & West to ye saveing of the same...³¹

The wording anticipates that Indians might end up the season in debt to Schellinger. In spite of this, at the end of the 1679 season Papasequin and Weompes appear to have been free from debt because they signed with another East Hampton company for 1680-81. Their contract with John Wheeler contained a similar clause, agreeing to hunt whales during the coming season and "... from time to time untill the said Indians have paid all their debts which they shall be trusted by the sd Wheeler..." The Indians were to receive the customary half share.³² Wheeler gave the Indians a barrel of oil and eight pounds of whale bone in advance, apparently to be sold or traded by the Indians for desired goods. This and the ten-pound forfeiture bond, payable to Wheeler, indicate once again that a network of debts was a major factor regulating Indian labor.

At the end of the 1680 season, Papasequin changed companies once again. This time he signed on for the following season with Benjamin Conkling, another East Hampton settler for the following season. The contract contains the familiar bond of ten pounds sterling and the obligation to work off any debt which the Indians might incur. The crew included Weump, who had worked with Papasequin for the past two seasons; Toby, who had been with them the previous year; and two others named Simon and Jephrey.³³

This is the last whaling contract that we have found with Papasequin's name. The practice of placing whaling contracts in the town records was abandoned after 1683 for reasons which remain unclear. Papasequin may have continued with Conkling, but his past record suggests that he seldom remained with the same company. It seems likely that owners of east-end whaling companies kept records in account books, as was done on Nantucket, but no such ledger has yet been found.

The next reference to Papasequin is in a bond agreement he negotiated with Schellinger in 1685. The proud Montauk finally had come to terms with the inevitability of English dominance over the Montauk. Because they wanted their son to grow up with a settler family, he and his wife

indentured their seven-year old boy, Quosuk, to Schellinger for ten years beginning in 1688. The boy was obliged:

...to serve him or his heires faithfully & obedientlie in whatsoever hee shal be set about in all Lawfull occasions... to looke after & preserve his Masters goods when he can & dureing ye time of his service: not to absent him at any time out of his masters service without his Masters leave...

The parents pledged to pay for any damage to property by their son during his indenture. In return, Schellinger promised to provide Quosuk with "...victualls lodging & clothes..." and to pay Papasequin twenty shillings upon delivery of the boy in 1688. When Quosuk finished his indenture, Schellinger was to pay him ten pounds sterling.³⁴

This is one of several bonds in town records which indenture Indian children to white families. The indenture system was widely used by white families in colonial America as a means of educating the poor and teaching them a useful skill. The striking difference between contracts indenturing white and Indian children was that contracts with Indians made no provisions for learning a trade or receiving instruction in reading and writing.³⁵

The last document mentioning Papasequin was a deed signed in 1703 for the land at Montauk. Together with thirty-one fellow Montauks, he was called in to confirm an earlier deed that transferred their land to the East Hampton settlers. In 1800, Montauk leaders charged that their grandfathers had been "smoked with white-faced rum" and tricked into giving up their land. There is considerable evidence to support the charge, but Papasequin's role in the events is not documented.³⁶

After 1700 the whaling industry went through several significant changes. Right whales had been killed in such large numbers that few were seen along the shores any more. Between 1687 and 1707 the numbers of barrels of whale oil produced on eastern Long Island dropped from over 2000 to 600.³⁷ The scarcity of right whales and the development of advanced technologies prompted the use of larger boats, which went to sea for months at a time and carried butchering and trying stations on board. Shore whaling continued into the early twentieth century, but it was pursued as a leisure sport or an occasional supplement to income rather than as a major source of revenue. Today only about 2,500 right whales are left on the planet. A declining population of less than 350 remain in the North Atlantic, according to a survey reported in 1988.³⁸

When the whaling industry shifted in the nineteenth century to long distance hunts which often took several years and spanned the globe, many Montauk and Shinnecock continued to play a significant role. One of these men who sailed during the glory days was David Wakus Bunn, a veteran

Shinnecock seaman who went to sea on the *Northern Lights* and later served as first mate on the *Lagoda*.”³⁹ In 1855 the New York State census listed 33 mariners and 18 fishermen out of 53 adult males living at Shinnecock.⁴⁰

These men inherited a maritime tradition that extended back to prehistoric times. Their ancestors, who played an essential role in creating the whaling industry, remain shadows on the historical page. Artor and Papasequin are the first to emerge from town archives on eastern Long Island, but there are many more Artors and Papasequins waiting for future research to bring them into the light.

NOTES

1. Everett Edwards and Janet Rattray, *Whale-Off: The Story of American Shore Whaling*, (New York: Frederick Stokes, 1932)
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3. Elizabeth Little and J.C. Andrews, “Drift Whales at Nantucket,” *Man in the Northeast* 23:17-38.
4. See William Douglass and Jon Bilbao, *Amerikanauk: Basques in the New World* (Reno, Nevada: University of Nevada Press, 1975).
5. F.E. Beddard, *A Book of Whales* (New York: G.P.Putnam’s, 1900), 22.
6. William Pelletreau, ed., *The First Book of Records of the Town of Southampton* (Sag Harbor: Hunt, 1874), 91-93.
7. *Ibid.*, 70-71.
8. Edmund O’Callaghan and Berthold Fernow, eds., *Documents Relative to the Colonial History of the State of New York*, 15 vols. (Albany: Weed and Parsons, 1856-1887), XIV:646.
9. See Alexander Starbuck, *History of the American Whale Fishery from Its Earliest Inception to the Year 1876*, 2 vols. (New York: Argosy-Antiquarian, 1964), I, passim.
10. Roger Williams, *A Key Into the Language of America*, (Detroit: Wayne State University Press, 1973), 181. In his ethnographic study, Williams described aboriginal butchering methods.
11. Edwards and Rattray, *Whale-Off*, 90-96.
12. O’Callaghan and Fernow, *Documents* XIV:608-609.
13. *Ibid.*, 646.
14. Pelletreau, *First Book of Records*, 56-57.
15. John A. Strong, “Sharecropping the Sea: Shinnecock Whalers in the Seventeenth Century,” in Gaynell Stone, ed. *The Shinnecock Indians: a Culture History*, (Boston: Ginn

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16. O'Callaghan and Fernow, *Documents*, XIV:648.

17. *Southampton Town Archives, Liber A*, 2:90.

18. John Bartlett, ed., *Records of the Colony of Rhode Island* (Providence: A Crawford Greene, 1857), II:284-286.

19. O'Callaghan and Fernow, *Documents* XIV:627.

20. *Southampton Town Archives, Liber A*, 2:99-100.

21. See Edward Byers, *The Nation of Nantucket* (Boston: Northeastern University Press, 1987), and Daniel Vickers, "The First Indian Whalemens of Nantucket," *William and Mary Quarterly* 40 (1983) :560-583.

22. Vickers, *ibid.*, 564; Elizabeth Little to author, 1987.

23. Vickers, "First Indian Whalemens," 571-572.

24. O'Callaghan and Fernow, *Documents* XIV:720.

25. *Southampton Town Archives, Liber A* 2:113.

26. *New York State Historical Archives, British Manuscripts, Albany, New York*, 26:153,157.

27. *Byers, Nation of Nantucket*, 93-101.

28. *Southampton Town Archives, Liber A*, 2:121.

29. *Ibid.* 133.

30. George Howell, *The Early History of Southampton* (Albany: Weed, Parsons and sons, 1887), 42-43.

31. Henry Hedges, ed., *Records of the Town of East Hampton* (Sag Harbor: Hunt, 1887), II:78-79.

32. *Ibid.*, 86-87.

33. *Ibid.*, 25-26.

34. *Ibid.*, 173-175.

35. See John A. Strong, "From Hunter to Servant," in Natalie Naylor, ed., *To Know the Place* (Hempstead: Long Island Studies Institute, 1986), 20-32.

36. *Montauk Deeds*, East Hampton Library Collections.

37. Harry Sleight, *Whale Fishing on Long Island* (Bridgehampton: The Hampton Press, 1931), p.7.

38. "Rare Whale Type Declines in Survey," *New York Times*, 3 March 1988.

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40. *New York State Census for the State of New York for 1855* (Albany: Charles Van Benthuyssen, 1857), 503.

African American Whalers: Images and Reality

By Floris Barnett Cash

The participation of blacks in the “golden age” of the whaling trade has generally been ignored. The crews of whaling ships were probably more diverse than the work force of any other occupation, with the presence of black seamen far more prevalent than has been reported. Despite the research of Sidney Kaplan, Alexander Starbuck, Edouard A. Stackpole, Martha S. Putney, and others, the contribution made by black men to the American maritime industry has yet to be fully recognized. Scholars tend to overlook or misinterpret the subtle descriptions in *Moby Dick*, reflecting Melville’s cosmopolitan vision of the ocean-world.¹

Whaling was one of the few nineteenth-century occupations which offered the black man employment and some respect because of his knowledge of the trade.² The unpopularity of whaleship work and the long duration of voyages made recruitment difficult. Thus, most whalers were young and inexperienced, and many were black. Whaling in America was multi-racial from the beginning. Rowboats and small sloops operating inshore in the 1600s were manned by a high percentage of Indians from Long Island and Nantucket. As the industry grew, Indians continued as hands and were joined by increasing numbers of blacks.³

African Americans worked on whaling vessels before the Revolution. Crispus Attucks, a runaway slave, spent twenty years as a merchant seaman before he was killed in the Boston Massacre. In 1776, Paul Cuffe was a noted New England ship builder and entrepreneur, who was captured and held for three months by the British while he was on a whaling voyage. Black whalers increased in number after the Revolution, as the demands of the industry grew.⁴ By 1807, one-third of the crews of whalers sailing out of Nantucket were blacks who lived in “New Guinea,” a small community on the outskirts of town.

In the early 1800s whaling ships also sailed forth from Sag Harbor with many black seamen on board. When the *Fair Helen* departed in 1817, her crew included an African-American steward, Cato Rogers, and Nananiah Cuffee, an Amerindian greenhand. Aboard the *Abigail* the following year were six black whalers. In 1819, on the same ship, there were seven African Americans among a crew of fifteen. In 1828 the *Thames* carried five blacks in a crew of seventeen.⁵

American whaling ships were from New England or New York. Between



*Robert Cushman Murphy, Whaleboat in Pursuit photograph ca. 1912.
Courtesy of The Whaling Museum, Cold Spring Harbor.*

American whaling ships were from New England or New York. Between 1820 and 1850 they were attracted mainly to the rich hunting grounds of the Pacific. In 1848 a Sag Harbor whaler passed through the Bering Strait into the Arctic, the last whaling zone that was opened by Americans. By 1859, more than half of the 25,000 American seamen were black, including the 2,900 who worked in the whaling industry.⁶

Whaling was a major American business enterprise prior to the Civil War. Sperm oil was valued as fuel for lamps, for use in soap and candle making, and as a lubricant for machinery. Baleen, or whalebone, was used to make a variety of articles such as corset and dress stays, umbrella ribs, and bristles for brushes and brooms. The bones of whales were ground up to make fertilizer for crops. In addition, ambergris, a grayish, waxy substance from the intestinal tract of sperm whales, was highly valued in making perfume.⁷ The sperm whale, the only large whale with teeth, also produced ivory which was used in decorative arts or scrimshaw carved by sailors on long voyages.

Although most black whalers were unskilled seamen, or greenhands, a few became mates and masters. African Americans also worked in the supporting industries of ship building and blacksmithing. Lewis Temple (1800-1854), who came to New Bedford from Richmond, Virginia in the late 1820s, was a well-know citizen by 1836, working in his own blacksmith shop. Temple understood the urgent need for a more effective harpoon that would not pull out the blubber when the whale pulled and tugged with great force on the tow line. In 1848 he invented the "Temple Toggle-Iron," one of the most valuable innovations in the history of whaling.⁸ In addition to Temple, such men as John Mashow, Absalom Boston, and Pardon Cook made outstanding contributions. Between 1830 and 1860, John Mashow (1805-1893) designed and built more than forty vessels at the Mashow Shipyard in South Dartmouth, Massachusetts. About one-third of these were whalers, including the beautiful *Jireh Swift*. The *Matilda Sears* was last commanded by Captain Manuel Enos of Cold Spring Harbor.⁹

Among the few blacks who rose through the ranks to become officers before the Civil War was Captain Absalom F. Boston, (1785-1855) a Nantucket man who went to sea in 1800 at the age of fifteen. In 1822 he became the master of the whaling schooner *Industry*, which sailed to the Gulf of Mexico with an all-black crew and returned six months later with seventy barrels of oil. His grandfather, Prince Boston, became a freeman in 1773 as a result of a court case brought by the Quaker, William Rotch, the owner of the whaler *Friendship* on which Boston had sailed.¹⁰

Pardon Cook (1796-1848), of Westport, Massachusetts, probably commanded more whaling voyages than any other African American between 1803 and 1860. Before assuming command of his own ship, he served in 1816 as second mate on the *Traveller* on a voyage to hunting grounds in the North Atlantic, and again in 1819 on the *Industry* to the waters off the Cape Verde Islands. Cook took his interracial crew to sea in search of whales on the *Elizabeth* in 1839, 1840, and 1841, and on the *Juno* in

1843. His first voyages were to the whaling grounds in the Atlantic, and the last was to the Indian Ocean.¹¹

Black mariners were often community leaders and active in the abolitionist movement. Captain Boston opened a store in his community of "New Guinea," and in 1827 helped to build a school for black children. Within a few years, the schoolhouse became an African Baptist Church. In 1837 a group of New Bedford African-Americans purchased a whaling brig, the *Rising States*. Two of the whalers, Nathaniel Borden and Edward J. Pompey, were Nantucket agents for the *Liberator* and active in the anti-slavery movement.¹² Frederick Douglass, well-known as an abolitionist, is less familiar in his role as a caulker fighting against race prejudice in a Baltimore shipyard. His knowledge of ships and sailor's talk assisted him in his flight from slavery to freedom in 1838. He eventually made his way to New Bedford, where he was employed in a variety of jobs connected with the whaling industry.¹³

Whaling was profitable for the Massachusetts towns of New Bedford and Nantucket, Bristol in Rhode Island, New London and Mystic in Connecticut, and Sag Harbor, Greenport, and Cold Spring Harbor on Long Island.¹⁴ After 1815, rising prices and increased demand for whale products lured more investors into the business. New ships were purchased and built—only manpower was needed. Until 1830 the Sag Harbor whaling fleet never had more than ten ships, and the yearly labor force never exceeded 125. Greenport emerged as a whaling harbor in 1795, and by 1830 was engaged in a flourishing business.¹⁵ Cold Spring Harbor, created as a "Port of Delivery" in 1799, became a whaling port in 1836 when John H. Jones and others purchased the *Monmouth* and outfitted it as a whaler.¹⁶

Eastern Long Island could easily supply the small number of seamen needed for whaling voyages from the villages of Sag Harbor, East Hampton, Bridgehampton, Southampton, and Greenport.¹⁷ The recruits included young men from the surrounding farms and a generous number of blacks and Indians.

Why did African Americans continue to work as whalers, a hazardous, low-paying occupation with undesirable working conditions? With less risky and higher-paying jobs available on shore, most of the seaman who could acquire better positions in other trades did so. Accordingly, the crew of a typical whaler was composed of a rising number of blacks and other persons excluded from more attractive occupations.

After 1830, international recruitment of whalers to work on American ships increased. People from every country of Europe mingled with Azorians, Cape Verde Islanders, Polynesians—known as "Kanakas"—and African Americans. International recruitment was necessary because of the high rate of desertion and an almost constant need for replacements. Many foreigners would work with fewer demands for higher pay or better treatment. Blacks, Indians, and "Kanakas," recruited and retained for a lower rate of compensation, were often victimized by unequal and oppressive treatment. Blacks generally received the same pay for the same

job, but often found themselves relegated to non-specialist positions.¹⁸

Crew lists usually indicated the presence of African Americans by mentioning complexion, place of birth, and hair texture; blacks can be identified by the use of such words as African, Colored, Negro, black, mulatto, yellow/woolly, or brown/woolly. A problem of identity develops when the term "dark"—for complexion and hair—was applied to non-African people from the Cape Verde Islands, the Azores, and elsewhere. Similarly, many Long Islanders of mixed Native American and African American ancestry, preferred to be classified as Indians.

The crew of a whale boat was categorized by occupations. A small, skilled staff of officers navigated, supervised the whaling process, and managed the crew. The number of seamen recruited depended on the size of the ship and the number of small boats. In addition to the master, or captain, and the first, second, and third mates, a whaleship carried three or four harpooners who also served as boatsteerers. The cooper, or shipkeeper, tended and opened the many barrels of supplies and food. The cook secured the provisions and prepared the meals. The steward assisted the cook and served the officers' meals. Some ships carried cabin boys, thirteen or fourteen years old. There were usually two or three experienced seamen, one or more veterans of at least one whaling voyage, and eight or more greenhands who had never been to sea.¹⁹

Table One provides a sampling of black crewmen who sailed from Sag Harbor between 1841 and 1864, and from Cold Spring Harbor between 1843 and 1852. They were primarily steersmen, stewards, cooks, seamen, and greenhands. Technically, the captain, mates, boatsteerers, and cooper may be considered as "management," showing that some African Americans were found in specialist or managerial positions.

TABLE ONE²⁰
SAG HARBOR

Ship and Year	Name of Black Whaler	Residence	Position
Silas Richards 1841	William Prime	Southampton	Steward
" "	Albert Jupiter	Southampton	Steersman
Citizen 1843	William Robbins	Cook	
Salem 1844	Paul Cuffee	Southampton	Steersman
Konohassett 1845	Reese Smith		Cook
" "	Solomon Ward	Southampton	Steward
" "	Philip Smith		Seaman
Manhattan 1845	Pyrrhus Concer	Southampton	Steersman
Sabina 1849	John Crook	Southampton	
Hamilton 1849	Walter Halsey	Southampton	Cook
Odd Fellow 1851	James Arch	Southampton	Seaman
Nimrod 1856	P. Hempstead	Southampton	Greenhand
Excel 1859	Simeon Rugg	Southampton	Cooper
Mary Gardiner 1859	Luther Cuffee	Southampton	Seaman
Noble 1859	Charles Miller	Southampton	Seaman

Columbia	1859	Thomas Bunn	Southampton	Cook
John A. Robb	1861	Abram Pedue	Southampton	Steersman
Odd Fellow	1861	Abram Arch	Southampton	
Pacific	1864	John B. Jupiter	Southampton	Cook
"	"	Robert J. Rugg	Southampton	Steward

COLD SPRING HARBOR

Tuscarora	1843	Jason Jack	East Hampton	
"	"	Addison Rher	Southampton	
"	"	Alfred Gall	Cold Spring	
"	"	George Jerome	Cold Spring	
"	"	Henry Payne	Oyster Bay	
Huntsville	1849	George Potter	Cold Spring	
Tallmadge	1845	Nathaniel Jack	East Hampton	Exp Whaler
"	"	John Richardson	Manhasset	Cook
"	"	Alfred Parker		Steward
"	"	Steven White		Shipkeeper
Edgar	1852	Nathaniel Cuffee	Sag Harbor	Boatheader
"	"	James Arch	Sag Harbor	Steward

The number of whaling vessels registered in the following American ports in 1840 were: New Bedford (252 vessels), Nantucket (73), New London (77), Sag Harbor (63), Fairhaven (49), Stonington (27), Warren, R.I. (24), Provincetown (23), Mystic (17), Greenport (11), and Cold Spring Harbor (8). In 1847, thirty-two ships returned to Sag Harbor with more than one million dollar's worth of oil and whalebone. That year the chief American ports among the thirty-four with whalers registered were New Bedford (254 vessels), Nantucket (75), New London (70), Sag Harbor (62), Fairhaven (48), Stonington (27), Warren, R. I. (23), Provincetown (18), and Mystic (17).²¹ In Sag Harbor, the peak of the whaling industry began in 1840 and lasted for a decade, as shown in Table Two.

TABLE TWO
SHIPS SAILING FROM LONG ISLAND PORTS BETWEEN 1840 AND 1850²²

Year	Sag Harbor	Cold Spring Harbor	Greenport
1840	17	1	5
1841	27	2	6
1842	12	1	1
1843	30	4	6
1844	27	3	5
1845	26	3	
1846	13	3	2
1847	15	1	5
1848	8	3	4

1849	2	3	2
1850	6	n.a.	3

The history of whaling is filled with news of shipwrecks at sea. Although Melville's description of the loss of the whaleship *Pequod* by a "great white whale" was fictional, there were many real tales of disaster. These included annual losses by pack ice, fire, grounding, and other mishaps. During the height of the whaling era, it was not unusual for a dozen or more ships to be missing at the end of a season.

Among the American whale ships wrecked by sperm whales were the *Essex*, of Nantucket, in 1820, with six blacks aboard, and the *Ann Alexander*, of New Bedford, in 1851. The Sag Harbor ship *Hamilton* was wrecked near the Rio Grande in 1845, the *Konohasset* went down off Pell's Island in 1846. The *Gem* sank in 1848, the *Romulus* was wrecked at Honolulu in 1849, and the *Franklin* sank off the coast of Brazil in 1850. The Cold Spring whalers *Richmond* and *Edgar* were wrecked in northern waters in 1846 and 1855 respectively.²³

The whaleship *Cassander*, of Providence, Rhode Island, was lost by fire at sea in May 1848, in a disaster involving two black recruits from the coast of Africa. When the fire alarm was given, the Africans jumped overboard. One was tossed a line, but he refused it and soon sank from sight. The other was picked up by the second mate's boat after the ship was abandoned. He confessed that he and his companion had set fire to four barrels of tar in the lower hold. Apparently, he and the other man were afraid they would be sold as slaves at the first port the ship entered. The African then stabbed himself in his side and jumped overboard.²⁴

TABLE THREE²⁵
LIST OF DEATHS OF U.S. WHALEMEN

Date	Ship	Name of Black Whaler	Residence
Aug. 1846	Konohasset	Solomon Ward	Southampton
" "	"	Reese Smith	
" "	"	Philip Smith	
Nov. 1848	Gem	Elynes Case	Sag Harbor
April 1848	Fanny	Peter Spencer	Wilmington, DE
Oct. 1849	Connecticut	Peter Fisher	
Nov. 1853	Harrison	William Cuffee	Sag Harbor
Nov. 1854	Mechanic	Nathaniel Holmes	
Jan. 1855		James McLean	
May 1855		David Wallace	
July 1855		Richard Augustus	Fair Haven, MA
Aug. 1855		James Cuffee	West Hampton
May 1859	Columbia	Thomas R. Bunn	Southampton
June 1859		Henry Cook	Southampton

A black whaler from Long Island participated in the rescue of shipwrecked Japanese sailors in 1848. Pyrrhus Concer was born into a slave family in Southampton in 1814. After working on a farm, he made a few trips to sea as a cabin boy. At the age of eighteen, three years before he was freed, Pyrrhus made his first whaling voyage with Captain Edward Sayre. In May 1845, he was aboard the *Manhattan* when it cleared Sag Harbor for a three-year whaling voyage in the northern Pacific. The captain of the vessel was Mercator Cooper and Concer was the boatsteerer. As the ship neared the Pacific island then known as St. Peter's Rock (now Tori Shima), eight hundred miles south of Japan, the crew discovered a number of shipwrecked Japanese whom they rescued and gave provisions. En route to Japan, another ship was found sinking with eleven Japanese men on board. The *Manhattan* picked them up and sailed for Tokyo Bay to be welcomed by swarms of people who came on board to greet the crew, especially Pyrrhus Concer—the insular Japanese of the time were intrigued by the presence of an African American.²⁶ Concer, like many easterners, went to California during the gold rush in 1849, but returned the following year. After he retired, he sailed passengers around Lake Agawam, near Southampton, for a small fee.

As the nineteenth century progressed, there was an increasing demand for whale oil. More and more whalers were fitted out; twenty thousand men formed the crews of more than seven hundred ships in the 1850s. Yet, despite larger fleets and rising prices for whale products, it took longer and longer to return with a “full ship” now that the whales had retreated to the distant waters of the Pacific and Indian Oceans. Thus, while the industry was expanding, the margin of profit decreased. More and more owners began to sell their ships and leave the industry. In 1857, the *Italy* was the last whaling ship to leave Greenport. In October 1858, the bark *Alice* sailed for the Pacific on the final trip out of Cold Spring Harbor.

Other factors adversely affected the industry. In 1859 the first oil well was drilled in Pennsylvania, and kerosene or coal oil began to replace whale oil as fuel for lamps. By the end of the Civil War, the whale oil boom was over. Blacks, as other Americans, were affected when the American whale fishery fell upon difficult times. John Mashow was forced to give up his shipyard, although he was listed as a “ship carpenter” in New Bedford city directories until his death in 1893. The brig *Myra*, last whaler to sail from Sag Harbor, was condemned and broken up at Barbados in 1874.²⁷ Amerindians, African Americans, immigrants, and others in similar circumstances followed the sea as long as it provided the best occupation available to them.²⁸

Opportunities to present a positive image of blacks in whaling were often dismissed because of racism. In 1913 the sculptor, Bela Pratt, commissioned to do the Whaleman Statue in New Bedford, Massachusetts, sought a “real boatsteerer, a man who has long been familiar with the harpoon.” He insisted on a model of the “Captain Ahab type,” although a black whaleman would have been more appropriate.²⁹ This historic oversight is changing. In July 1987 a bronze, life-size statue of Lewis Temple

was dedicated in front of the New Bedford Public Library. Significantly, the statue was created by James C. Toatley, an African American sculptor. "We are removing injustice," said Mayor John K. Bullard to a crowd of one hundred people, "and honoring a man who should have been honored 130 years ago."³⁰

The mayor's tribute to Lewis Temple applies equally to African Americans from Long Island, who deserve far more attention than they have received for the vital role they played in whale fishery, a leading American industry.

NOTES

I would like to express special appreciation to the manuscript librarians and staffs of the African American Museum at Hempstead; the Cold Spring Harbor Whaling Museum, Cold Spring Harbor; the John Jermain Memorial Library, Sag Harbor; the Nantucket Historical Association, Nantucket, MA; the Old Dartmouth Historical Society and Whaling Museum, New Bedford, MA; and the Suffolk County Historical Society, Riverhead.

1. Sidney Kaplan, "Lewis Temple and the Hunting of the Whale," *New England Quarterly* 26 (March 1953): 78-88; Alexander Starbuck, *History of the American Whale Fishery from Its Earliest Inception to the Year 1876* 2 vols. (1878); reprint ed., New York: Argosy-Antiquarian Ltd., 1964; Edouard Stackpole, *The Sea Hunters* (Philadelphia: J.P. Lippincott, 1953); Martha S. Putney, *Black Sailors: Afro American Merchant Seamen Prior to the Civil War* (Westport, CT: Greenwood Press, 1987); Herman Melville, *Moby Dick, or, The Whale* (1851; reprint ed., (New York: Oxford University Press, 1987). The crew of the *Pequod* mirrored the diversity of real whalers: harpooners included Queequeg, a Polynesian; Tashtego, an Amerindian; Daggio, an African American; Fedallah, a mysterious oriental, and Pip, a black cabin boy who was given the perilous task of killing whales from a small oar-manned boat.

2. Harry Morton, *The Whale's Wake* (Honolulu: University of Hawaii Press, 1982), 64.

3. Starbuck, *History* I: 5, 9; Elmo Paul Hohman, *The American Whaleman* (New York: Longmans, Green and Co., 1928), 23, 51.

4. John Hope Franklin, *From Slavery to Freedom* (New York: Vintage Books, 1969), 128, 159.

5. See crew lists of the *Fair Helen* and the *Abigail*, Marine Historical Association, Mystic, CT., and crew list of the *Thames*, Pennypacker Collection, East Hampton Public Library.

6. Philip S. Foner and Ronald R. Lewis, eds., *The Black Worker to 1869* (Vol. I of *The Black Worker: A Documentary History from Colonial Times to the Present*; Philadelphia: Temple University Press, 1978), 196-199.

7. Paul Giambarda, *Whales, Whaling and Fishcraft* (Centerville, MA: Scrimshaw Publishing Co., 1967), 17.

8. Kaplan, "Lewis Temple," 78-88.

9. Waldo Howland, *A Life in Boats, The Concordia Years* (Mystic, CT: Mystic Seaport Museum, 1988), 30. Also see manuscript archives, Old Dartmouth Historical Society, New Bedford, MA; Frederick P. Schmitt, *Mark Well The Whale!* (Port Washington: Kennikat Press, 1971), 100.

10. Putney, *Black Sailors*, 100. Prince Boston was the first black man to earn the same "lay"(share) as the white crew members ("Nantucket Black Whalers," *Cape Cod Times*,

3 June 1985, 19).

11. Putney, "Pardon Cook, Whaling Master," *Journal of Afro-American Historical and Genealogical Society* 4 (Summer 1983): 47-54.

12. Lorin Cary and Francine Cary, "Absalom Boston, His Family, and Nantucket's Black Community," in Barbara Linebaugh, *The African School and the Integration of Nantucket Public Schools, 1825-1847* (Boston: Afro-American Studies Center of Boston University, 1987), 15-23, in the collection of the Nantucket Historical Association, Nantucket, MA; *Colored American Magazine*, 28 January 1837; Stackpole, *Sea Hunters*, 287.

13. Frederick Douglass, *Narrative of the Life of Frederick Douglass* (1845; reprint ed., Garden City: Anchor Books, 1963), 93-98.

14. Giambarba, *Whales*, 3.

15. Walter Menggeweit, "Whaling Vessels Sailing Out of Greenport, Long Island, NY," *Southampton Register* (Winter 1985), a list in the collection of the Suffolk County Historical Society, Riverhead.

16. Schmitt, *Mark Well the Whale*, 8.

17. William R. Palmer, "The Whaling Port of Sag Harbor" (Ph. D. dissertation, Columbia University, 1959), 86.

18. Morton, *Whale's Wake*, 65-66.

19. Schmitt, *Mark Well the Whale*, 27-28.

20. Compiled by the author. Sag Harbor data was derived from Harry Dering Sleight, *The Whale Fishery On Long Island* (Bridgehampton: Hampton Press, 1931), and Russella J. Hazard, "The Whaling Fleet" (Sag Harbor: Sag Harbor History Room, John Jermain Memorial Library, 1950). Some men who sailed from Sag Harbor probably resided in other Long Island villages. Cold Spring Harbor information was extracted from crew lists in the Hewlett-Jones Collection, Cold Spring Harbor Whaling Museum.

21. Foner and Lewis, *Black Worker*, 198; J.T. Jenkins, *A History of the Whale Fisheries* (1921; reprint ed., Port Washington: Kennikat Press, 1971), 234.

22. Compiled from Starbuck, *History of American Whale Fishery*, vol. II.

23. Schmitt, *Mark Well the Whale*, 84-87, 94-95; for the *Essex*, see Owen Chase, *Shipwreck of the Whaleship Essex* (New York, 1963), passim.

24. "Loss of the Whale Ship Cassander," *The Friend: Devoted to Temperance, Seamen, Marine and General Intelligence*, March 1849, 22-23. The *Friend* was a missionary journal published in Honolulu, with a section on shipwrecks of whaling vessels.

25. Compiled from *The Friend*, August 1846, 23; November 1848, 32; April 1848, 32; Oct. 1849, 56; Nov. 1854, 80; Aug. 1855, 64

26. Arthur P. Davis, *A Black Diamond in the Queen's Tiara* (n.p., 1974), 4-9, 13.

27. Menggeweit, "Sailing Vessels"; Schmitt, *Mark Well the Whale*, 126; Palmer, "Sag Harbor," 312.

28. Whaling continued into the twentieth century, by which time Yankee crews had nearly

vanished. The *Daisy*, a brig built at Setauket in 1872, sailed out of New Bedford for the South Atlantic in 1912. Photographs of the voyage by Dr. Robert Cushman Murphy, the assistant navigator, show an interracial crew, which was made up largely of men of African descent, most of whom were Cape Verdeans and West Indians (Robert Cushman Murphy, *A Dead Whale or a Stove Boat: Cruise of the Daisy in the Atlantic Ocean, June 1912-May 1913* (Boston: Houghton Mifflin Co., 1967), passim).

29. Kaplan, "Lewis Temple," 78.

30. New Bedford *Standard-Times*, 2 and 6 July 1987.

The Montauk Steamboat Company

By Edwin L. Dunbaugh

Most of the information in this article regarding steamers and schedules has been gleaned from the advertising pages of The Sag Harbor Express between 1859 and 1900.

The use of steamboats for passenger and freight service peaked in the United States during the 1850s. Thereafter, succumbing to railroad competition, steamboat traffic sharply declined on many American waterways.¹ This was not the case on Long Island Sound. Through most of the nineteenth century and even well into the twentieth, the Sound served as a major water highway for traffic between New York and Eastern Long Island or Southern New England.

Although its steamers were not as large or as palatial as the grand steamers of the Fall River or Providence lines, the nightboats of the Montauk Steamboat Company provided a popular way of travelling between the East End of Long Island and New York as recently as 1917. As a rule, the steamer pulled out of her pier at Sag Harbor at four in the afternoon, circled around Shelter Island for stops at Greenport at five and Orient at five-thirty, then sailed out through Plum Gut into Long Island Sound to arrive in New York at four in the morning. Though 4:00 A.M. might not have been considered a convenient arrival time for some passengers, the steamers had to arrive at that hour to get the produce shipped by East End farmers into the New York markets which were generally already active by this hour. East End merchants also used the steamers for regular trips to procure stock from New York wholesalers.

Although the Long Island Rail Road extended to Greenport as early as 1844, the trains ran only from the North Fork, did not usually schedule early morning arrivals in New York, and, until 1910, ran only as far as Brooklyn, where goods had to be transferred to barges to reach Manhattan, whereas the steamer landed produce right on South Street in the vicinity of the major food markets.

Various steamers served on the Sag Harbor-Greenport-Orient-New York route in the early nineteenth century, but reliable sources take us back only to 1859, at which time the small steamer *Cataline* was making three round trips per week, departing from Sag Harbor on Mondays, Wednesdays, and Fridays, and from New York on Tuesdays, Thursdays, and Saturdays. This schedule was generally maintained by steamers plying this route.²

Cataline's captain was Wickham S. Havens, who also owned a store

at the corner of Water and Main Streets in Sag Harbor. In those days, the captain of a steamboat was not necessarily a navigator, his role more a combination of purser and cruise director. He had experienced pilots aboard to concern themselves with avoiding shoals and slowing down for landings.

Cataline continued through the fall of 1859, though once the harvest was over she reduced her schedule to two round trips a week and about mid-November, to one, a pattern that continued through the history of the service. Once ice began to form in Gardiner's Bay, the service would be discontinued until spring.

For the 1860 season, Wickham Havens and his associates did not renew their charter of *Cataline*, but instead chartered *Massachusetts* from Andrew J. Richardson, a New York merchant with whom they did business who now also served as their New York agent. *Massachusetts*, built in 1842 to run between New Bedford and Nantucket, was sold in 1858 to an excursion line in New York, which is where Richardson had found her.³ Although a different group of East End people chartered *Cataline* that spring and ran her on the same schedule as *Massachusetts*, the latter proved more popular; advertisements for *Cataline* ceased after mid-May.

In June 1860 the little steamer *Iolas* began a new service, making the usual stops at Orient, Greenport, and Sag Harbor, and then moving on to make several landings on Peconic Bay ending ultimately at Jamesport about noon for a short stop before retracing her route in the other direction. *Iolas* was an odd-looking craft, built by James P. Allaire (the inheritor of Robert Fulton's engine works) to carry heavy iron products from his foundry in Red Bank, New Jersey, to Manhattan. This tiny craft, only 121 feet in length, carried two walking-beam engines and no less than four tall smokestacks, two forward of the sidewheels and two aft. With her massive engines, boilers, and stacks, there could not have been much room for passengers or cargo.⁴ The service was not a success, for *Iolas* ended her season in November 1860 and never returned to Peconic Bay.

Wickham Havens' *Massachusetts*, however, was well-patronized and continued running until forced to quit by the ice in January 1861. She was back in service on March 4, the day of Lincoln's inaugural, by which time seven states had seceded—by April the fighting started. During the Civil War, the small vessels previously available for charter were now in such demand by the War Department, for use as transports or dispatch boats, that the East End merchants had trouble finding steamers for the route.

Massachusetts continued on the run through the fall of 1861 and started the next season early in March. But after barely a week, her owner, Andrew Richardson, announced he had chartered her to the government for service near the battle zone in lower Chesapeake Bay. From March through June 1862, there was no steamer service at all. Then, just in time for the Fourth of July, Captain Havens was able to secure the *Niagara*, a larger and stancher steamer than *Massachusetts*, built for a run on Lake Ontario. *Niagara*, too, was chartered to the War Department through the

winter of 1862—she was back on the Sag Harbor run by June 1863, her new name of *Suffolk* suggesting that Richardson intended her tenure to be permanent.⁵

Alas, this would not be the case. *Suffolk*'s season barely had started when, in July, Richardson sold her to the War Department for \$30,000.⁶ Through the summer of 1863, Captain Havens operated the small steamer *R. Donaldson*. But with the government now paying exorbitant rates for tonnage of any sort, there was no service during the seasons of 1864 and 1865.

The situation was reversed when the war ended in 1865 and the government began auctioning off the vast tonnage acquired during the conflict, most of it at bargain prices. Neither Wickham Havens nor Andrew Richardson returned to the steamer business, but in 1865 we first meet George C. Gibbs, who would be the dominant figure in the New York-Greenport-Sag Harbor steam-boat service to almost the end of the century. In December 1865—hardly a propitious season to start a new steamer line serving—farm country—Gibbs, backed by a group of merchants from Sag Harbor, Greenport, and other nearby villages, acquired the small surplus propeller steamer *Artisan* one of the few propeller steamers ever used on the route. *Artisan* made one round trip a week between Sag Harbor and New York, with the usual stops at Greenport and Orient, suspended service because of ice, and resumed in April 1866, making three round trips a week on the schedule established by *Cataline* and *Massachusetts*.

With small steamers again available, it is not surprising that in the season of 1866 Gibbs had competition on the route. In May, another group of East End merchants, based more in Greenport than in Sag Harbor, secured the steamer *Edward Everett* from Boston.⁷ Had these operators genuinely wished to serve East End farmers and merchants, they would have agreed to run steamers on alternate nights, thus providing a daily service to New York. This was not to be the case. Both *Artisan* and *Edward Everett* sailed from each port at the same time on the same nights, dividing what trade there was and even racing each other to be first at way landings.

Edward Everett left the scene at the end of the season. For the next two seasons Captain Gibbs ran his small ship, *Artisan*, only through the lean winter months, but chartered larger steamers during the height of the season. For the summer of 1867, the Gibbs group procured the handsome steamer *River Queen*, built in 1864 to serve as General Grant's dispatch boat, for which she was given especially elegant appointments.⁸

River Queen returned to Virginia at the end of the 1867 season and again left the run to the smaller *Artisan*. Next season Gibbs chartered the *Escort*, which along with a companion vessel, *W. W. Coit*, was built at Mystic, Connecticut, during the war to capitalize on the enormous prices the government was willing to pay for almost anything that would float. After serving, like *River Queen*, as dispatch boats in the Chesapeake area during the war, the two tried competing, unsuccessfully as it turned out, on several Long Island Sound routes. By 1868, however, neither was occupied, indicating that Gibbs probably arranged the charter of *Escort* at a fairly

reasonable rate.

At 185 feet in length, this sidewheeler was somewhat larger than steamers previously serving the route. Her layout was more in the style of the typical Long Island Sound nightboats, though a relatively small version: her hull was fairly narrow, while the superstructure over it, in a manner still familiar on ferryboats, was somewhat wider. Her Main Deck (the first wider deck over the hull, or over the "guards") was enclosed forward for freight, while the after part, called the Quarter Deck, contained an entrance hall and a group of cabins at the stern reserved for women travelling alone. Most of the hull was taken up by the big walking-beam engine. But at the stern, just below the Quarter Deck, was the dining saloon lined with free berths (covered by curtains) for gentlemen passengers choosing not to pay extra for staterooms and willing to sacrifice privacy in the process. The Saloon Deck, above the Main Deck, had a pilot house forward and aft of it a long, carpeted, public hall with staterooms opening along each side.

Escort ran only one season for Captain Gibbs. For the next few years he got by with *Artisan*, even through the summer, though in 1870 he chartered *Eastern City*, the largest steamer to serve the route to that time. In December 1871 Gibbs again faced competition. A. W. Dimock, president of the Atlantic Mail Steamship Company, announced in several New York and Eastern Long Island papers that,

...having determined to give the people of the East End of Long Island the advantage of a commodious and firstclass steamboat...[he had] purchased the *Escort*, already favorably known...as one of the best adapted to the route. Captain J. B. Edwards, her commander, is now fitting her up in the most substantial and elegant manner....If necessary to the accommodation of increased business and travel, a Daily Steamer will run on the route.⁹

Dimock, whose firm operated between New York and Bermuda, could hardly have had a personal interest in establishing a steamer line to Eastern Long Island in mid-winter. He may secretly have been funded by interests close to the Long Island Rail Road, which by then had every reason for wanting to put Gibbs and his friends out of the business of transporting passengers and freight between Eastern Long Island and New York.

If getting rid of Gibbs was the object, the new company was successful. *Artisan* started the 1872 season in March, as usual, but gave up after a few weeks. The new line, on the other hand, made good on its promise to introduce daily service, for by early July Dimock ran not only *Escort*, which he owned, but also *J. B. Schuyler* (officially registered *James B. Schuyler*), chartered for the season from the Bridgeport Steamship Company. With two steamers in operation, the New York Steamship Company, as it now called itself, could operate steamers daily from both New York and Sag Harbor.

In the fall *J. B. Schuyler* returned to the Bridgeport Line and *Escort*

reverted to three round trips through the lean months. Since the new line had been successful, it startled Long Island patrons when the parent Atlantic Mail Steamship Company fell an early victim of the Panic of 1873 and declared bankruptcy in March of that year. The Eastern Long Island backers of the firm regrouped with the help of some New York capital. To keep the line running, the former owners repossessed *Escort*, which had belonged to the bankrupt Atlantic Mail. The new company announced that the re-chartered *J. B. Schuyler* would be back on the route as soon as the ice cleared enough to get her away from her berth in Bridgeport.¹⁰

With *J. B. Schuyler* scheduled for two sailings a week from each port in the spring, and three in the season, Gibbs worked up the courage to bring his *Artisan* back on the route. However, the trade preferred the better boat, and by mid-June Gibbs gave up again. Apparently, the companies reached agreement because in July George C. Gibbs was listed as master of the *J. B. Schuyler*.

By the end of the season of 1873, the East End investors had become dissatisfied with the management of the line by its New York agents, who also held the majority of stock. Next spring they formed a new corporation known (after its reorganization in March 1876) as the Montauk and New York Steamboat Company (a puzzling name for a line that never ran to Montauk), funded entirely with capital subscribed in the East End of Long Island. Not wishing to depend on the availability of chartered steamers, the firm purchased one of its own. It chose *W. W. Coit*, a near sister ship of *Escort*, which, like *Escort*, had been built at Mystic in 1864.¹¹ Similar to *Escort* in layout, *W. W. Coit* was a sidewheeler 172 feet in length. She carried thirty-one staterooms on her Saloon Deck, with forty-six berths for men along the sides of the dining saloon in the after part of the hull, and thirty more in the "Ladies' Cabin" aft on the Quarter Deck. Like *Escort*, *W. W. Coit* was a small version of a typical Long Island Sound nightboat and well suited to this service.

Once *W. W. Coit* came on the route in 1874 under Gibbs' command, the system remained relatively stable for another dozen years. It encountered little opposition from rival steamers for over a decade, but considerable competition remained between the Montauk & New York Steamboat Company and the Long Island Rail Road for the trade between the East End and New York. The railroad tried many tactics to force Gibbs to quit, but East Enders dutifully supported the steamboat, aware that without its competition nothing would prevent the railroad from raising its rates.

For the 1885 season, the railroad competed directly with Gibbs by running a steamer of its own. For the purpose they chartered *Frances*, a well-appointed iron-hulled vessel, the spare steamer of the prestigious Providence and Stonington Line. Though *Frances* was probably a finer steamboat than *W. W. Coit*, local merchants stayed faithful to Gibbs; *Frances* did not return after finishing the season.

One result of the intrusion was the realization by Gibbs and his associates that they needed a more modern and better-appointed steamer, to fend

off competition and maintain the good will of patrons. 1886 saw a complete reorganization of the company, now to be known as the Montauk Steamboat Company, with George Gibbs as president. Capitalization of \$100,000 was quickly subscribed, once more from East End investors.

The firm's first act was to order a new steamboat from the Harlan and Hollingsworth yard in Wilmington, Delaware, for delivery in time for the season of 1886. This steamer was *Shelter Island*, with a length of 175 feet on the water line. She was not much larger than *W. W. Coit*, but extraordinarily handsome, ahead of her time in design. She had an iron hull when most Sound steamers were still wooden-hulled, and was one of the first to carry feathering paddlewheels, in which the buckets (paddles) were hinged to the wheel to strike the water in a more forcefully. Feathering allowed sidewheels of smaller diameter, eliminating the huge paddleboxes carried by most sidewheel steamers and giving *Shelter Island* her characteristically neater lines.

Shelter Island's first trip from New York to Sag Harbor, commanded, of course, by George C. Gibbs, took place on Saturday, July 3, 1886. So great was the crowd headed for eastern Long Island that Fourth of July holiday that the line ran *W. W. Coit* that night, as a second section. After this trip, however, *W. W. Coit* was laid up as a spare, and ultimately sold for excursion service around New York in 1890.

In 1886, eastern Long Island—particularly the South Fork—was becoming a popular summering area for the well-to-do of New York and Philadelphia. Steamers no longer hauled only farmers' produce westbound and merchants' stock eastbound; they now, at least in summer, carried increasing numbers of vacationers as well. The company ordered another steamer from Harlan and Hollingsworth, to increase summer profits by providing daily service. The *Montauk*, an almost exact sister ship of *Shelter Island*, was delivered in time for the summer season of 1891. With Gibbs commanding the *Montauk* and his brother, John, taking his place as master of *Shelter Island*, the Montauk Steamboat Company started daily summer sailings from both Sag Harbor and New York.

Since summer homes in South Fork towns like Southampton, Water Mill, and East Hampton belonged to a class of people whose breadwinners could afford a Saturday half-holiday, or even take the whole day off. The idea was becoming popular that on weekends a man might join his family in the country. Before this time, the steamer line had not scheduled sailings from either port on Sunday nights. After *Montauk* and *Shelter Island* established daily service in 1891, the steamer out of New York continued sailing on Saturdays but not Sundays, but the boat from Sag Harbor lay over on Saturdays and sailed instead on Sundays, even with little or no freight, as a service to East End weekenders.

The two-steamer daily service usually ended about mid-September, after which the line reverted to three, two, or later only one round trip a week until spring. As a rule, *Shelter Island* performed the winter service while the newer *Montauk* hibernated. Another major change in the organization of the company took place in 1894, when George C. Gibbs, its

commander since 1865, decided to retire. Also at this time, many locally-owned shares of stock were bought by a small group including H. F. Cook and H. F. French, both well-known local merchants, and George Fahys, whose family recently had moved their watch-case factory to Sag Harbor from New Jersey, in the process becoming Sag Harbor's largest industry.¹³ Advertisements not only announced that the line was under new management, but also proclaimed an "improved cuisine," suggesting that food served during the long Gibbs regime might not have been to everybody's taste.¹⁴

The business had grown so rapidly, particularly during the summer, that the new managers ordered another larger steamer from Harlan and Hollingsworth. While this ship was being built, the company ran *Montauk* through the winter and chartered *Shelter Island* for a new route out of Miami, Florida, then little more than a village serving the local coconut groves. Henry Flagler, who had made his fortune in the oil business working with John D. Rockefeller, decided to turn Miami into a major winter resort and to that end was completing construction of the Florida East Coast Railroad. Another of Flagler's plan was to have steamers waiting at Miami to take passengers arriving by train on to Nassau, Havana, or Key West.

Shelter Island was to cover the route between Miami and Key West (then a busier and more populous port than Miami), leaving Miami every other morning on the arrival of the train from the north, sailing down the keys, arriving at Key West in early evening, and making the trip in reverse on alternate days.

She left Greenport on 13 February (after being pulled out of the ice by a tugboat), sailed out into the Atlantic and arrived in Miami five days later. On the morning of February 22, she set off on her first trip to Key West. Two hours out she ran onto an apparently uncharted reef between Grecian and Mosquito shoals. Backing the wheels at full power, she pulled away. Although the sharp coral had punctured her hull, her pumps held the incoming seawater at a safe level. Since repair facilities in Miami were not as good as in Key West, long a regular port of call for steamers headed in or out of the Gulf of Mexico, the captain decided to risk continuing the voyage south. Less than twenty miles from her destination, water suddenly poured in faster than the pumps could handle it, putting out her fires. Having lost her power, *Shelter Island* slowly filled and sank in six fathoms of water off Loggerhead Key. Fortunately, two tugs from Key West rescued the passengers and crew before she sank.¹⁵ It was an expensive loss (she was valued at \$80,000 but insured for only \$60,000), but at least the line could count on the new steamer's being finished in time to join *Montauk* for the summer season.

March 17, 1896—three weeks after the sinking—was probably the most exciting day in the history of the Montauk Steamboat Company. This was the date that *Shinnecock*, the largest and finest steamer ever built for the line, was launched at Harlan and Hollingsworth's yard in the presence of the company's officers, families, and guests. President E. F. Cooke's

five-year-old daughter was chosen to swing the bottle of champagne, after which *Shinnecock's* sleek steel hull slid gracefully down the ways into the Christiania River.¹⁶ Late in June, with her engines installed and her superstructure completed, she sailed north to join *Montauk* for the start of the summer season.

Shinnecock was a remarkable steamer of which the Montauk Line was justly proud. Though at 238 feet in length, she was small compared with the nightboats of the Fall River or Providence lines, she was adequate for the needs of her line, and considerably larger than her consort *Montauk*. *Shelter Island* and *Montauk* had staterooms on the Saloon Deck, with only a pilot house and officers' rooms on the Gallery Deck above; *Shinnecock* carried a Gallery Deck with staterooms, giving her eighty-three staterooms compared with *Montauk's* fifty-one. While most Long Island Sound nightboats had windowless dining saloons in the hull aft, *Shinnecock's* dining section was forward on the Saloon Deck, surrounded by windows allowing diners to enjoy the passing scenery. Finally, her interior was graced with far more of the elegant furnishings popular in this late Victorian era than were earlier steamers of the line.

Once the popular *Shinnecock* entered service, the schedule demonstrated the owners' increased sensitivity to the needs of businessmen spending weekends with their families in Long Island's eastern resorts. The *Montauk* sailed from New York as before at five in the afternoon on Monday, Wednesday, and Friday. *Shinnecock* left at the same time on Tuesdays and Thursdays, but on Saturdays, when many businessmen worked half a day, she departed at one, sailed through the Sound by daylight, and docked at Sag Harbor about ten o'clock in the evening. Since there was no sailing from Sag Harbor on Saturday, both steamers laid over on Saturday nights. Thus on Sunday night, on which not many years earlier no sailing was scheduled, both steamers were available to take weekend passengers back to New York, *Montauk* sailing at 5:00 p.m., and *Shinnecock*, giving weekenders maximum time with their families, leaving at nine and bringing her passengers into Manhattan by seven o'clock, Monday morning. To be in position for her Monday night sailing from Sag Harbor, *Shinnecock* had to race back through the Sound, usually nearly empty.

Through the winter of 1896-97, *Montauk* served as the winter boat, while *Shinnecock* was sent down to Chesapeake Bay on a charter. For several years, *Shinnecock* frequently was chartered to other companies during the winter months, when *Montauk* sufficed for the New York-Sag Harbor route.

In the summer of 1897 the Montauk Line offered a new service in the form of a daily round trip from Sag Harbor to Block Island. During July and August, the steamer arrived from New York in the morning at seven, sailed again at eight, stopped at Greenport at nine, and crossed Gardiner's Bay to arrive at Block Island at eleven. The steamer remained at the island long enough for her passengers to partake of a seafood lunch at one of the island's hotels before boarding for sailing at one o'clock. Back in Sag

Harbor at four, the steamer had to be ready for her daily departure, one hour later.

Shinnecock followed a particularly rigorous schedule on weekends. She took her usual Saturday early departure from New York at one in the afternoon, arriving at Sag Harbor about ten in the evening. On Sunday, while *Montauk* remained at her pier in Sag Harbor, *Shinnecock* sailed to Block Island and back, and took the late Sunday sailing for New York at nine o'clock at night. After arriving in New York on Monday, she sailed back to the East End during the day to be ready for the four o'clock Monday evening sailing from Sag Harbor. This schedule led *Shinnecock's* crews to label her "perpetual motion."

The summer season of 1898 ended early so that *Shinnecock* could serve the nation, albeit at a very pleasant charter rate. When the Spanish-American War was over, *Montauk* was designated a landing place for transports returning from Cuba. As is often the case in war, particularly if fought in a tropical climate, many soldiers came home not only with wounds but also with serious diseases, in this case Yellow Fever. Early in September, the Army chartered *Shinnecock* to transport stricken veterans from quarantine in Montauk to reassignment in New York City Hospitals. In three weeks—for a fee of \$1,000 a day—she made twenty-two round trips, carrying a total of 2450 sick or wounded soldiers.¹⁷

Toward the end of the 1899 season, New York witnessed two major marine events in which the Montauk Line's two steamers were participants. Late in September New York staged a mammoth naval parade to welcome Admiral Dewey back from his victories in the Philippines. Both *Shinnecock* and *Montauk* were chartered for the occasion, sailing loaded to the guards with spectators. In the first week of October 1899, races for the America's Cup took place off Sandy Hook and again both steamers were chartered to take spectators to watch the event.

Fall 1899 also saw a major change in the management of the line; both the Montauk Steamboat Company and the connecting day boat from Greenport to New London were bought out by the Long Island Rail Road. Thus ended several decades of rivalry. In 1900, in order for it to gain access to Pennsylvania Station then being built in Manhattan, the Long Island Rail Road became a Pennsylvania Rail Road subsidiary. Thus the Pennsylvania, somewhat indirectly, became the owner of the Montauk Steamboat Company.

These corporate deals brought no change in the operation of the steamers, however, except that the new management announced plans to dispose of *Montauk* and build a sister ship to *Shinnecock*. Accordingly, *Montauk* was sold at the end of the 1901 season to Canadian parties. With her name changed to *King Edward*, she ran for several years between Sault Ste. Marie and ports on Lake Erie. In 1910 she was sold again and her name changed to *Forest City*. Then in 1923, she was resold to an American firm for excursion service out of Detroit, and her name changed back to *Montauk*.

Although marine columns continued reporting plans for a sister ship

to *Shinnecock*, the intended steamer never materialized. The boom in passenger traffic which had inspired the building of *Shinnecock* in 1896, had by 1902 begun its slow decline. In 1895, the Long Island Rail Road extended its southern branch to Montauk. Now South Fork weekenders could take a Long Island train to the Hamptons in something over two hours rather than elect the nine-hour trip to Sag Harbor aboard *Shinnecock*. Furthermore, now that the line was controlled by the Long Island Rail Road, the new owners had little interest in improving the facilities of a steamboat line whose services paralleled their own.

For the season of 1902, the Montauk Steamboat Line chartered *City of Lawrence*, the spare steamer of the Norwich Line, to alternate with *Shinnecock* in the summer daily service. *City of Lawrence* was a fine steamer and at 267 feet in length even larger than *Shinnecock*. Although refurbished, she was hardly new, having been built in 1867, just three years after the long-retired *W. W. Coit*. When the season of 1903 approached with no new steamer built, the management purchased *Sagadahoc* from a line operating between Boston and the Kennebec River, and renamed her *Greenport*. *Greenport* was larger than *Shinnecock* but even older than *City of Lawrence*, having been launched as *Star of the East* in 1866. She proved an unsatisfactory acquisition, too expensive to operate and too slow for the line's demanding schedules. After the season of 1905, she was sold for service on the Hudson River. From this time on, the line reverted to running a single steamer—*Shinnecock*—on alternate nights, even during the busy summers.

In 1905 the line purchased *Queen Caroline*, built in 1902. She was speedy and smart, but a day boat with only limited accommodations for overnight passengers and thus unsuited as *Shinnecock*'s consort. Renamed *Montauk II*, she plied a new day route between Montauk and Block Island, and also took over the New York-Sag Harbor winter run (now a freight run, attracting few passengers), releasing the larger *Shinnecock* for profitable charters during the winter months. By 1915, the increasing popularity of automobiles plus the improved service of the Long Island Rail Road (which after 1910 ran directly into Manhattan) rendered the Montauk Steamboat Company unprofitable. When the United States entered World War I, the government, to protect military installations on Plum Island, barred all marine traffic through Plum Gut. Since any alternate steamer route would add an hour or more of travel time, this regulation provided the Long Island Rail Road with the excuse to terminate the services of the Montauk Steamboat Company's nightboat to New York.

The beautifully appointed *Shinnecock*, still a fairly new boat, was sent to serve as a barracks at the Quarantine Station on Staten Island. When the war ended in 1918, she was taken to the Long Island Rail Road's docks at Whitestone and laid up, each year looking shabbier and more in need of paint. In 1924, *Montauk II* (now covering the Rail Road's ferry service between the East End and New London) was sold, and *Shinnecock* taken out of mothballs to replace her. In adapting the once elegant overnight steamer for service as a ferry, most of her Gallery Deck aft of the

pilot house was removed, staterooms were ripped out on her Saloon Deck, and the freight deck was cleared to make room for carrying automobiles.

Shinnecock remained on this ferry run until replaced by newer but less interesting steamers in 1935. In that year, this lovely steamer, so recently the pride of the Montauk Steamboat Company's night line to New York, was sold again, renamed *Empire State*, and with her interior gutted even further, reduced to carrying beach-bound crowds from lower Manhattan to Coney Island. After two years of this she was sold again, to Boston owners, and, renamed *Town of Hull*, used in a similar service between Boston and the Nantasket beaches.¹⁹

In the World War II season of 1942, with repairs difficult and fuel scarce, the aging steamer was placed in lay-up, theoretically only for the duration of the conflict. But when her owners began to scavenge her for parts for their other steamers, it was clear that they had no thought of running her again. (Coincidentally, 1942 was also the year that her former running mate, *Montauk I*, now over fifty years old, was taken out of service on Lake Erie.) *Town of Hull's* fate became irreversible when, during the fierce hurricane of October 1944, she was torn from her pier and blown on the rocks at Peddock's Island. No longer fit for service, she was later hauled up on the beach at Pemberton, where what was left of her wooden superstructure was gradually dismantled. By 1946 nothing remained but her rusting hull and boilers, which were sold for scrap.

Scrapping the rusty carcass of the once-proud *Shinnecock* in 1946, however, did not quite represent the last vestige of the East End's nightboat to New York. As far as is known, the iron hull of *Montauk I* of 1891 still serves as part of a breakwater, somewhere on Lake Erie.

NOTES

1. George R. Taylor, *The Transportation Revolution, 1815-1860* (New York, 1951), 72-73.
2. Erik Heyl, *Early American Steamers III* (Buffalo, 1964), 221.
3. *Ibid.*, 181-82.
4. *Sag Harbor Express*, 14 March 1862.
5. Heyl, *Steamers III*, 253.
6. *Ibid.*
7. *Sag Harbor Express*, 24 May 1866.
8. Heyl, *Steamers III*, 299-300. On one occasion, Grant sent *River Queen* to Washington to bring President and Mrs. Lincoln to a military conference at his headquarters on the James River.
9. *Sag Harbor Express*, 4 December 1861, 6.
10. *Ibid.*, 1 April 1873.
11. *Nautical Gazette*, 11 April 1874, 6.

12. *Sag Harbor Express*, 5 August 1866.
13. *Nautical Gazette*, 19 March 1896, 8.
14. *Sag Harbor Express*, 2 April 1894.
15. Edward A. Mueller, "The Florida East Coast Steamship Company," *Steamboat Bill*, Vol. XXXVIII, No.2 (Summer, 1981), 109.
16. *Nautical Gazette*, 19 March 1896.
17. *Ibid.*, 28 September 1898, 6.
18. Mueller, "Florida East Coast Steamship Company," 110.
19. *Steam Boat Bill* 3 (December 1946): 418-19.

Oystering on Long Island in Comparative Perspective

By Lawrence J. Taylor

INTRODUCTION

The history of oystering may be as long as the history of our species, and the evidence certainly suggests that these mollusks were an important food for the earliest inhabitants of Long Island. As with other maritime pursuits, oystering remained a form of hunting and gathering wherein innovations were fairly well restricted to the means of transportation used to reach the “beds.” Their sedentary nature and the predictability of their location in estuarine environments, however, made the oysters easy prey for even primitive technologies.

Not until the middle of the nineteenth century did the technology of oystering, both here and abroad, move much beyond the bronze age. It was then that the spiraling population of western Europe and the United States greatly increased the demand for oysters, bringing fleets of English, Dutch, French, and American mariners to the point of depleting many of the natural beds on which generations of oysters had grown on the shells of their ancestors.

The second half of the century saw the development of various techniques by which humans sought to influence the supply of oysters—to move oystering, in some degree, from gathering to agriculture. This transition, involving the adaptation of a range of maritime populations to equally varied environments, was accomplished in various ways and to different degrees depending on the context. Thus the rise of the oyster industry on the shores of Great South Bay was at once unique and also a local variation of a far more general story.

I attempted to convey something of both the unique and general character of that story in *Dutchmen on the Bay*,¹ an ethnographic reconstruction of the history of the Dutch immigrant community of West Sayville, whose population played a critical role in the development of oystering there. That study sought to “ask big questions in small places,” by using an intensive exploration of a locality through a critical period of time to illuminate general social and cultural process. This ethnographic approach to the past allows us to put human faces on what might otherwise seem mystically impersonal historical forces.

Immigration statistics and graphs registering rising oyster production are brought to life in the stories of real people making choices without the benefit of historical hindsight. In their necessary particularity, ethnographic case studies also tend to cast some doubt on the too easy formulations of received wisdom, if not enough to reject the model, then

at least to suggest modifications. Most of all, such studies show the connection between the local and the general, between micro- and macro-history.

The rise of oystering is a good case in point. As indicated above, the development of new forms of oystering in the western world can be understood from a global perspective as a general adaptation to changing ecological and economic parameters. As increasing demand and exhausted natural resources stimulated the development of new ways of interacting with the natural world, the ensuing path of domestication was not unique to any location, nor even to oystering. Rather, it was part of a general pattern of economic development and industrialization of natural resource production. But actual adaptation takes place on the local level, where particular individuals and groups come to terms with specific environments. My task in *Dutchmen on the Bay* was to explain the ways in which a group of Dutch immigrants and their descendants brought their talents and proclivities to bear on the problem of adapting to the natural—but also to the economic, political, social, and cultural—features in which they found themselves on Long Island's south shore.

Such a focus necessarily illuminates not only the adapters, but the niche, in this case the southern shore of western Suffolk County through the second half of the nineteenth century. More light can be shed on the local adaptive process by moving beyond the single case study to a controlled comparison with a limited number of other localities. I will pursue this strategy here, attempting to discover something about the particularities of Long Island through a brief comparison of the development of oystering there with the path followed by the industry in two other locations: the estuaries of Zeeland in the Netherlands—the origin point for most Dutch immigrants to Long Island; and a bit further south of Long Island, along the American east coast on south Jersey's Delaware Bay shore.

GREAT SOUTH BAY

The first Dutch immigrants arrived in the town of Islip in 1849 to find oystering a mainly part-time pursuit among the local agricultural population. The conduct of the shellfisheries was first of all dependent on the natural environment. In strict terms, Great South Bay is not a bay at all, but a lagoon, by virtue of a series of barrier beaches which tend to insulate it from the Atlantic Ocean. From the vantage point of Islip's shore, the apparently protected waters and surrounding landscape would have given the appearance of great tranquility. A gentle sandy coastline without great hills or bluffs surrounded the bay, broken on the barrier beach side only at Fire Island inlet.

The southern shore of Long Island was itself a highly sandy glacial outwash plain, transected by many small rivers and creeks which thereby created extensive marshlands before emptying their fresh water into the bay. But the placidity of this environment was misleading, for the bay was and is a highly volatile environment. The action of tides constantly altered the outline of the barrier beaches, and periodic hurricanes wrought

even greater changes, breaking new inlets through the fragile barrier beaches and letting the ocean into the protected lagoon. Relative access to the ocean, in fact, had created two distinct ecozones, colloquially known as the "East Bay" and "West Bay."

The differences between the zones, whose approximate boundary ran from the Islip shore at Nicoll Point to Fire Island, was primarily a function of their respective salinity. The East Bay, away from Fire Island inlet, was more sheltered from the ocean so that its many fresh water feeders kept the salinity level fairly low; the more open reaches of the West Bay were far saltier. This difference was crucial to shellfish because young oysters could set and grow on the natural beds of the East Bay, where the lower salinity lessened the predator population. That same low salinity, however, caused a slow growth rate for the oysters. Conditions in the West Bay were the reverse; higher salinity was good for growth but also for such oyster predators as the snail-like "drill." The less vulnerable clam also prospered in these waters, but was considered to be not as tasty as oysters and therefore brought lower prices at the market.

Oysters were found on their natural beds, especially off the shore of the town of Brookhaven, where they were taken primarily by means of tongs from the sides of small sailing vessels. It was a seasonal pursuit for Yankee farmers still in a hunting and gathering stage. Most of the product was consumed locally, but some found its way via coasting vessels into the rapidly expanding market of New York City. The relative proximity of this metropolitan market was as vital an aspect of the ecological niche as any natural feature, contributing to the ultimate viability of a more specialized pursuit. According to local accounts, it was in New York that the first Dutch immigrants who were to settle on Great South Bay's shore heard about the oysters of that region.² Their first adaptive decision was to forego the farmlands of western Michigan and Iowa, where many of their compatriots were heading, for the altogether different environment of Long Island. These Zeelanders were skilled mariners who knew how to catch oysters, so their decision to settle on the shore of Great South Bay appears sensible enough.

Yet they faced considerable risks. Land was scarcer and more expensive than on the Midwestern frontier, and it remained to be seen if they could make a place for themselves in an already established fishery. After all, why should the natives want to share so valuable a local resource? As it turned out, their timing was excellent, for oystering in America was poised for transition from hunting and gathering to something akin to agriculture, and these Dutch immigrants were in several regards particularly well situated to take advantage of this.

Unlike the more elaborate methods adopted in Europe (as we shall see below), the innovations in American oystering at first involved only limited interference with the natural proclivities of the oyster. Connecticut oystermen had discovered that if they dumped thousands of empty shells on the bottom of the Long Island Sound near estuarine waters at the proper time, they could in effect create their own oyster beds.³ The propitious

moment had to do with the reproductive habits of the bivalves, who release millions of sperm and eggs into the ambient waters when the summer sun heats the Sound to just the right temperature. The myriad offspring formed by the chance meeting of these gametes settle to the bottom, where most of them sink into the sand and perish. The lucky ones hit clean, hard surfaces—primarily the empty shells of their ancestors—to which they can affix and grow. Thus by dumping shells over a two-week period in July when the oysters were believed to be reproducing, the oystermen were providing such surfaces in hopes of greatly augmenting the number of survivors. If the shells were dumped too late, the young oysters would be lost in the soft bottom; if too early, the shells would be covered with mud by the time the critical moment arrived. This technique was crucial to the development of what became a prosperous Connecticut maritime industry specializing in the production of “seed,” or young oysters. Adult oysters from this region proved relatively unpopular on the market, so the viability of the industry there depended on removing the young oysters to another location where they could grow faster and better.

Removal of oysters from one place to another for the purposes of growing was the other critical innovation of the period, and one with particularly important effects on the developing social organization of the industry. It was discovered—apparently independently in various locales—that if young oysters were moved to more saline waters when their age made them less vulnerable, they would grow rapidly there. This gave rise to an agricultural rather than gathering version of oystering. One gathered “seed” oysters from natural beds in brackish waters (or from the shells one had dumped in suitable waters) and “planted” them on “grounds,” in a more saline environment, from which they could be “harvested” after several years of growth. And, if you could produce enough seed yourself by this method of dumping shells to “catch growth,” then you would not need to depend on natural beds.

In Great South Bay, enough seed could be gotten so cheaply that local oyster growers had no need to bother with the Connecticut oysters until the 1870s. But the simple movement of oysters from beds in the East Bay to grounds in the West—especially if those grounds were properly prepared with a layer of shells to keep the transplanted oysters above ground—promised both to make up for the declining natural crop and to provide a steady income for the ambitious oysterman. Ultimately, however, technical innovations depended on political and legal conditions as well as on natural causes, which is the reason why local and national differences proved crucial to the development of the industry. The central question was one of property, for if oystermen were going to dump shells and transfer oysters from natural beds to other underwater lands, they had to be sure that others would not reap the benefits of their investment.

Long Island was in this regard a fascinating combination of two very different traditions of tenure imported from England. The towns of Islip and Brookhaven held certain resources in common, including that section of Great South Bay and the barrier beaches which lay between the

mainland and the Atlantic Ocean. Accordingly, shellfish which lay in this territory were common property; outsiders were forbidden to "take away shellfish," while locals had to submit to the regulatory authority of their elected town officials. But, with the advent of "oyster farming," entrepreneurs naturally demanded the privatization of at least some of these underwater grounds, and the enclosure of the watery commons.

There was also the individual colonial patent, a form of property in the aristocratic colonial, rather than corporate communal English tradition. One such patent, originating in a seventeenth-century grant and held mid-century by the "Smith heirs" included a very large tract of underwater territory off the Brookhaven shore.⁴ The precise legal status of this property was (and continues to be) disputed, but at the time it represented a tract of essentially private property in prime oyster ground territory. The response of the towns to the new oystering techniques was to offer leases, beginning in 1851, on small underwater lots on which young seed oysters could be planted. Those with the time and money to invest in this more intensive shellfishery leased such grounds, Dutch immigrants prominent among them. Many of their neighbors remained part-time oystermen, tonging seed oysters in the spring and selling them to the planters, and tonging or raking the humbler clam in the summer.

There are several reasons for the disproportionate commitment of Dutch immigrants to the new form of oystering. Entrepreneurial behavior was culturally valued by these Calvinist fishermen, who had both the "Protestant ethic and spirit of capitalism"⁵ They also were immigrants, and, regardless of old world ethos, thereby predisposed to such risk-taking—the very act of immigration is a great step along such an entrepreneurial path. Finally, their immigrant status and relative lack of resources meant that the Dutch had less commitment to agriculture, and hence more incentive to risk money and time in the developing oyster industry.

Over the ensuing decades, several of these immigrants amassed extensive holdings and profits.⁶ Although the original intention had been to limit the acreage leasable by any individual, various strategies succeeded in concentrating large holdings in the hands of relatively few 'oyster barons.' Their rise was due not only, or even mainly, to the leasing of grounds but rather to their investment in somewhat larger vessels, from which they purchased other oystermen's catch and took it to market. These middlemen then proceeded to lease more and more ground, purchase more and larger boats to harvest their own oysters, and eventually to control their own supply of seed oysters by buying or leasing productive grounds in New England.

Technological advances augmented their success; motorized boats and dredges harvested millions of oysters, and the railroads brought them to market. Even so, the tenure on which this industry was based and dependent still rested with the town government, which could always revoke what remained of renewable, rather short-term leases. The one

important exception was the private property claim enjoyed by Oyster "King" Jacob Ockers, after his Blue Point Oyster Company succeeded in purchasing the colonial patent off Brookhaven from the Smith heirs.⁷ Many local baymen worked seasonally for the planters, crewing on their dredgeboats or handling oysters on the shore. Their ranks were swelled by renewed Dutch immigration in the 1880s and '90s. Regardless of the number of weeks they spent in such virtually maritime factory labor, neither Americans nor Dutch seemed to identify as workers. Attempted unionization and strikes around the turn of the century were singularly unsuccessful.⁸ The Dutch were discouraged from such activity, not only by dependence on their employers but also by the conservative Reformed Church tradition which opposed competing organizations and identities.⁹ They also liked to think of themselves—no matter how unlikely the prospects—as future entrepreneurs and only temporary employees. Both Dutch and Americans preferred the label of "independent fishermen," focusing their identity on the spring and summer months when they tonged seed oysters and clams, respectively, from their own small boats. What independence they did enjoy was somewhat illusory, for at all times the planters stood between them and the market.

The life of the bayman ultimately depended more on legal than natural circumstances. Without the so-called "free bay"—the open commons—seed oystering on the natural beds would come to an end. That, in fact, was the legal compromise: the natural oyster-bed region of the East Bay was deemed public and non-leasable, while the underwater lands of the saltier West Bay—with few naturally set oysters but good for planting—were sectioned off and leased to local residents. The class of small baymen also depended on the barring of dredging on public beds, another legal measure which protected their income in the seed oystering season.

Thus the baymen, Dutch and American, developed something like class consciousness, but not as workers. Rather they saw themselves as small entrepreneurs whose democratic rights of access to an open fishery demanded protection from the real or perceived depredations of increasingly powerful planters. These interests were best pursued not in unions but in baymen's associations which could agitate on their members' behalf in local political arenas.¹⁰

What with markets, disease, and pollution, the shellfisheries of Great South Bay have experienced wide ups and downs since that time. The single greatest change, however, was wrought by the hurricanes of the 1930s, whose destruction left the ocean with a new way into the bay through Moriches Inlet. The increased salinity favored the propagation of the oyster drill, and hence the demise of the oyster—at which point, clams replaced oysters and the industry adjusted. Most interesting to the anthropologist, the social organization of the industry remained pretty much the same through the 1970s, though with even fewer large planters. Because thousands of baymen still tonged and raked shellfish, the industry retained the bi-polar character it assumed in the middle of the nineteenth century.

Preservation of the "free bay" remained the political objective of the

baymen and the province of town and local government. Efforts by anyone to restrict easy access to the resource or, worse, to further privatize the pursuit through the development of aquaculture, ¹¹ met and continue to meet with concerted opposition.

OTHER OYSTER FISHERIES:

ZEELAND

The special character of the social structure of the pursuit on Long Island emerges more clearly through comparison with two other oyster industries which developed in the same historical period. A brief study of similarities and differences may suggest which characteristics most distinguish Great South Bay industry and, indeed, Long Island as a social and natural environment.

We can begin with the place the Dutch immigrants came from—the estuaries of the Netherlands province of Zeeland, and in particular the shellfishing town of Yerseke on the Oosterschelde River. The natural environment here was very different from Great South Bay's. The Oosterschelde emptied into a large, funnel-shaped estuary lying open to the North Sea, with huge tides whose retreating waters exposed miles of mud flats. As on Long Island, the local inhabitants for millenia had taken shellfish from these shallow waters, but the rise of nearby urban markets meant that by the sixteenth century these locals were vigorously exploiting the natural beds from small, flat-bottomed sailboats.¹²

While the province of Zeeland held ultimate domain and governance rights over the conduct of the fisheries, local access to the beds seems to have been a mix of communal and aristocratic claims. As early as the seventeenth century, there were experiments with "planting" oysters on plots granted by the provincial government, but local fishermen considered such attempted privatization illegitimate, if not illegal, and poached without restraint. ¹³ This situation persisted until 1870, when the government took a decisive step toward privatizing and capitalizing the oyster industry; the Minister of Finance decided to lease at public auction the large natural bed of oysters near Yerseke. The best beds were bought at high prices by urban entrepreneurs, who proceeded to transform the pursuit into an industry and the Yersekers into workers.¹⁴

Holding beds by lease proved to be the critical condition for the transition from gathering to farming oysters. However, the ecology of the estuary leant itself to methods different from those adopted in Great South Bay. Instead of dumping shells into deep water, as the Americans did, Dutch oyster farmers carefully placed ceramic roofing tiles in the exposed mud flats, where workers could regather them with wheelbarrows and scrape off the oyster spat, eventually taken to plots of underwater land for further growth. This transition effected major social consequences:

Within an extremely short span of time the social relations of production in the industry were completely transformed. From a

relatively egalitarian business—all oystermen being independent, having equal access rights and possessing similar means of production—oystering turned into a strongly stratified one.¹⁵

The case of Yerseke again makes it clear that development of oystering depends on the adaptation of individuals, not only to a natural environment but to an economic and political one as well. The early development of urban capitalism in The Netherlands was critical in a number of ways to the path followed by the oyster industry. First, it created urban markets and transportation systems to supply them; second, by the late nineteenth century it produced a landless class large enough to supply hands for such a labor-intensive industry; and finally, it created a class of entrepreneurs who willingly attached themselves to such new prospects.

None of this would have gone as smoothly without a state whose definition of commonweal was essentially capitalist, so that the increased productivity expected from oyster farming on leased grounds could be perceived as in the national interest. The result was much fuller industrialization, rationalization, and capitalization of oystering than prevailed on Long Island, and the consequent total demise of Holland's "bayman" class.

DELAWARE BAY¹⁶

Meanwhile, back across the Atlantic, another sort of fishery was developing in Delaware Bay, on the southern shore of New Jersey. The natural ecosystem there resembled the Oosterschelde rather than Great South Bay. As with the former, a large river, the Delaware, emptied into a bay which opened into the sea; there were no protective barrier beaches, and thus a fairly constant cline from fresh to saltier water. The oyster beds were found in upper, brackish reaches of the bay where, as in Europe and Long Island, locals tonged the bivalves from small boats. Here again, proximity to an urban market—in this case Philadelphia—led to increasing exploitation of natural oyster beds and the development of a seed transplanting system in the middle of the nineteenth century.

Transplanting of seed oysters proceeded in somewhat the same fashion as in Great South Bay, with one important exception. Whereas legislation prevented the dredging of oysters from natural beds on Long Island (ensuring survival of tongers as a class), in New Jersey the State held rights to the beds and permitted dredging, although restricting seasonal access. This had clear and predictable ramifications for the social relations of production, for effective dredging required larger craft. By the turn of the century, a fleet of several hundred schooners—most of them about one hundred feet long—beat up to the oyster beds in the spring and gathered hundreds of bushels of seed each day before sailing back down the bay to their leased grounds, where they shoveled their catch overboard.

Because the State leased the lots to local oystermen at low rates, the expanse of leasable underwater land meant that few would be excluded from the fishery for lack of grounds. However, the rising costs of

increasingly large and well-equipped boats and gear meant that only “serious” oystermen found their way into the pursuit. Their less fortunate neighbors found berths on the boats, or employment on shore at the shipping end of the business. Black men came up seasonally from the Eastern Shore of Maryland to work on the boats until the repeal, in the 1940s, of state legislation prohibiting motors (for conservation reasons). Romantic as the forest of masts may have seemed, local skippers did not hesitate to fell them in favor of engines the day the law changed. In the meantime, around the 1920s, the demand for shucked oysters grew and the local industry adapted. Several entrepreneurs built shanty-towns in the vicinity and encouraged their erstwhile seasonal migrants to settle down with their families, thus supplying a year-round cheap and dependent labor force.

While these circumstances contributed to the rise of a class of fairly prosperous dredge-boat skippers, enough oyster beds too small for dredging remained to offer employment for tongers, both black and white. Combined with other kinds of fishing, this activity allowed the persistence of a bayman class, some of whom could hope to earn enough and get sufficient bank credit to enter the real fishery business at some point in their careers. Within the oyster fishery, however, a high level of capitalization was possible. This, combined with the varying fortunes of the pursuit, led to the differentiation of two sorts of oysterman: owners of companies running several dredge-boats, who hired captains as well as boat and shore crews, and independents who owned their own boats and leased their own lots but typically did not have elaborate shore operations for shucking and shipping oysters.

This continues to be the case today (as of 1986), when the oystering fleet of fifty vessels includes about twenty-five independents, the remainder comprising the fleets of three companies. Unfortunately, the devastating effect of the parasite MSX has called into question the future of the entire industry. Early casualties were the tongers, who seem to have just about vanished in the 1960s. Undependable supply and markets make the so-called “independent” oysterman a precarious creature as well. All have other sources of income; as one of them put it, “I work at the sandplant and I’m an oysterman—one of them pays the bills but I’m not sure which, so I’m afraid to quit either one.”¹⁷

For the purposes of comparative inquiry, this case illustrates ways in which the level of political/legal control, in conjunction with local ecological and economic circumstances, acted to propel the developing industry down a particular path, producing a specific set of relations of production and a different set of maritime classes. On the eastern shore of Delaware Bay, underwater lands were “common” to the people of New Jersey, whose legislators promoted the growth of an industry without excluding as many locals as had the Zealanders. But unlike the towns of Long Island, New Jersey was less inclined to limit the industry’s productivity in order to preserve a large class of small producers—the independent baymen. Beds in Jersey waters reserved for tongers would

not have been worth the dredgers' time. There was nothing like the politically powerful block of tongers existing on Long Island; such a group, of course, would have enjoyed far less relative prominence at the state level than did Long Island tongers at town meetings.

The racial character of the Delaware Bay oyster industry was also distinctive, compared with Long Island's and The Netherlands.' Although some blacks could pursue a variety of baymen activities with small boats and inexpensive gear, and one or two recently have been employed as boat captains for an oyster company,¹⁸ they form an underclass, seasonally employed when needed. Their early employment as shuckers—particularly the women—also seems to have led to an early definition of that work as something that whites—especially white men—do not do. Interestingly, that work was mostly performed by females in labor-intensive Zeeland, and by males in West Sayville.

CONCLUSIONS

As this brief study shows, the history of Long Island's oyster industry must be understood both in its full local context and in contrast with other shellfisheries, domestic and foreign. The comparison reveals the critical role played by notions of common property rights, and by the legal-political community in which such rights are vested. It is on this score that Long Island contrasts most interestingly, not only with other countries but with other American regions.

There are fascinating consequences to these distinctions for both the governors and the governed. From the point of view of the former, the common good will be conceived very differently, depending upon the community's size. There is a big difference—conceptually and actually—among “the people” of the province of Zeeland, of the state of New Jersey, and of the towns of Brookhaven and Islip. There is also a difference in the political and symbolic role of baymen in these respective arenas. Taken together, these factors made some legislators act to preserve a class and its livelihood, even at the expense of economic rationality and (though this is disputed¹⁹ conservation of the resource. This was the case in the Chesapeake, too complex a tale to tell in this space but a striking instance of the preservation of an archaic oyster fishery through legislation.²⁰ Elsewhere, governments were not so motivated, probably nowhere less so than in nineteenth-century Zeeland where the interests of capitalists and the people were perceived by those in power to be perfectly coincident.

As for Great South Bay, on Long Island's shores we continue to act out the great American contradiction between communal and individual rights, with both sides waving the flag in defense of “fundamental rights and values,” whether for private property or a “free bay.” In this respect, West Sayville is an especially appealing prism through which to examine the social and cultural impact of an industrializing fishery. Here, where this experience is present within the compass of a village, is a well-remembered variation on the general range of shellfishing communities—

somewhere between places like the Chesapeake (where large-scale entrepreneurs had made almost no headway against independent oystermen) and some of the European regions, which by that time had been transformed into virtual mill towns.²¹

NOTES

1. Lawrence J. Taylor, *Dutchmen on the Bay: The Ethnohistory of a Contractual Community* (Philadelphia: University of Pennsylvania Press, 1983).

2. *Ibid.*, 55-59.

3. For the techniques of oystering in the Northeast, especially in southern Connecticut, see John M. Kochiss, *Oystering from New York to Boston* (Middletown, CT: Wesleyan University Press, 1974).

4. The Smith heirs were descendants of William Nicoll, Islip's colonial patentee, whose vast land and bay bottom holdings granted by the Crown remained intact after the Revolution.

5. See Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Talcott Parsons, with a Foreword by R. H. Tawney (New York: Charles Scribner's Sons, 1958).

6. The largest operation was "King Oyster Planter" Jacob Ockers' Blue Point Oyster Company. The second largest shipper was Edward Westerbeke, followed by Wolfer Van Popering and Nicholas Vander Borgh. Most oystermen were Dutch. Leading non-Dutch operators included the Beebe Brothers, J.A. Cochrane, and Edward Brown (Taylor, *Dutchmen*, 85-86). Unpublished records of the oyster industry are in the collection of the Suffolk Marine Museum, West Sayville, Roger Dunkerley, Director.

7. See Taylor, *ibid.*, 90; also Jeffrey Kassner, "The Consequence of Baymen: the Hard Clam Management Situation in Great South Bay, New York," in S. Siddall and L.J. Taylor, eds., *Coastal Resource Management and Shellfishing: A Global Perspective*, special volume of *Journal of Shellfish Research* 7 (1988), n. 2, 289-293.

8. A 1902 strike by a handful of Jacob Ocker's workers was quickly broken. In its short, two-and-a-half year existence the Oysterman's Union of Sayville "made no headway in transforming the oyster companies into union shops" (Taylor, *ibid.*, 79).

9. The Dutch word *verzuiling*, the best English word for which is "pillarization," was a vertical alignment along theological lines, which obviated horizontal stratification by class (Taylor, *Dutchmen*, 13-14, 141-163. Religious aspects of the Dutch immigrant community, only touched upon in the present essay, are a central concern of *Dutchmen*).

10. For the Independent Baymen's Association, see Taylor, *ibid.*, 26, 110. The owners' organization was The Blue Point Oyster Shippers Protective Association, whose *Minute Books 1901-1910* are in the collection of the Suffolk Marine Museum.

11. Opposition of baymen to privatization of the commons is evidenced in many parts of the world, and includes "poaching" as well as political action. See Lawrence J. Taylor, "The River Would Run Red with Blood: Community and Common Property in an Irish Fishing Settlement," in McCay and Acheson, eds. *The Question of the Commons: Anthropological Contributions to Natural Resource Management* (Tucson: University of Arizona Press, 1987), and Bonnie J. McCay, "The Pirates of Piscary: Ethnohistory of Illegal Fishing in New Jersey," *Ethnohistory* 31 (1):17-37.

12. Rob Van Ginkel, "Limited Entry: Panacea or Palliative? Oystermen, State Intervention and Resource Management in a Dutch Maritime Community," in Siddall and Taylor, eds., *Coastal Resource Management*, (2):310. For shellfishery in Zeeland, also see E.P. Van Ysseldijk, *1000 Jaar Yerseke* (Yereke, The Netherlands, 1973), and Taylor, *Dutchmen*, passim.

13. Van Ginkel, *ibid.*, 311

14. *Ibid.*, 312

15. *Ibid.*

16. This section is based on the author's field and archival research in Port Norris, New Jersey, some of which was conducted under the auspices of New Jersey Sea Grant.

17. Dick Riggan, Port Norris, New Jersey, 5 January 1984.

18. This is based on direct observation of the entire oyster fleet. In the 1983-84 season one black captain worked for one of the large companies, and I was told that there had been another several years earlier.

19. Preserving the fish, preserving the fisherman, and maximizing profit may all be mutually antithetical in specific situations. See the report, "Suffolk County's Hard Clam Industry" (Stony Brook: USB Marine Sciences Research Center, 1985), and L.J. Taylor, "Introduction," in Siddall and Taylor, *Coastal Resource Management*: i-iii. 20. See Taylor, *Dutchman*, xiv, 86, 101, 112.

21. *Ibid.*, xiv.

Connecticut's Changing Relationship with Long Island Sound

By Andrew German

Looking north from Long Island's north shore highlands, Connecticut looms as a thick blue-grey smudge on the horizon. To the west one can identify buildings and prominent hills. Further east the definition is much less clear, and sometimes heat waves break the silhouette into oddly-shaped islands. From the Connecticut shore, Long Island is a low, dark band, rising to distinct clarity in the west but disappearing altogether at the widest point in mid-Sound.

The mariner has a different perspective. Fitful breezes in the western end of the Sound have confounded mariners for centuries. In summer, when the prevailing southwesterlies arise late in the morning, Connecticut becomes the lee shore and sail-powered vessels can make good their eastward passages or run into any of the numerous harbors and river mouths along the northern edge of the Sound. In winter, the cold northwesterly winds freeze the rim of the Sound and put Long Island's forbidding north shore to leeward of vessels struggling through the chop. Storm winds generally come out of the northeast, again threatening vessels with the bluff headlands of Long Island's north shore.

Such weather patterns have created these conditions for most of the twelve thousand years since the retreat of the last great ice sheet left Long Island as a sandy deposit beyond the granite and traprock ribs of Connecticut. The rocky headlands of Connecticut create sheltered bays and harbors all along the coast. In addition, the rivers that drain the uplands—the Housatonic, Quinnipiac, Connecticut, Thames, and numerous smaller streams and estuaries—create either convenient harbors or navigable waterways into the interior. The brackish water in these estuaries and the coastal marshes contains a salinity level and nutrient load that are ideal for the marine life that flourishes beneath the waves. By contrast, only a few harbors and bays on the western third of Long Island's north shore offer shelter to vessels and marine life.

The tide is little problem in mid-Sound. A mean tidal rise of six or seven feet in six hours creates few current problems there, but at either end of the roughly 100-mile waterway the tide rushes through narrows at up to six knots. The main entrance through the barrier islands that extend east of Orient Point is the Race, called the "Horse Race" in *The English Pilot* of 1753. Here the tide, in effect, cascades over the lip of the Sound. The narrow, twisting channel through the ledges at the western end of Long Island is even worse, as the name Hell Gate implies. A sailing vessel can rarely work against the tide in those constricted waters.¹

Like the tides of Long Island Sound, the fortunes of Connecticut have ebbed and flowed along its reaches during more than three and a half centuries of recorded history. Through much of this time the Sound has been an essential link in the economic and social polarity that has characterized Connecticut's relationship with New York.

For the Native Americans to its north, the Sound offered bountiful summer waters. Their seasonal living patterns brought them to dwell near the estuaries in the warm season. There, they engaged in agriculture and hunted and fished. Surviving shell heaps indicate that they knew well the natural oyster beds in the brackish estuaries. They also made full use of the seasonal migration of fish through the Sound, some of which, like shad and Atlantic salmon, made their way up the rivers to spawn. While the native peoples spent much of their time beside the Sound, they might also venture upon it in their log dugout canoes. Even when the more warlike Pequots—reportedly a renegade Mohawk offshoot from what is now upstate New York—invaded the coastal region east of the Connecticut River late in the pre-colonial era, the seasonal pattern remained.²

At the time Aadriaen Block made the first recorded European passage down the "Great Bay" (Long Island Sound), and ventured forty miles up the Fresh (Connecticut) River, in 1614, Southern New England probably harbored the densest concentration of Native Americans on the continent. But the Dutch, who sought trading opportunities with the natives in their preoccupation with reaping profits in the New World, were frustrated by a Native American world view that they did not understand. Speaking of the "Quiripey" (Quinnipiac) tribe around present-day New Haven Harbor, Johan de Laet reported that "they take many beavers, but it is necessary to get them into the habit of trade, otherwise they are too indolent to hunt the beaver."³

The Dutch established their trading post, Fort Good Hope, on the Connecticut River north of present Hartford in 1633. They had little interest in settling, choosing rather to trade with the natives for furs that could be shipped to The Netherlands through New Amsterdam.

The first English colonists arrived in the Connecticut River Valley with more permanent settlement in mind. Traveling overland, a Pilgrim band established a house and stockade at Windsor in 1633, followed by a settlement at Wethersfield in 1634 and the arrival of the Reverend Thomas Hooker's party at Hartford in 1636. The Dutch complained that the English drove them away from their trading post despite prior Dutch purchase of the land from the natives, and on Saybrook Point, at the mouth of the Connecticut "the [Dutch] States' arms had been affixed to a tree in token of possession; but the English who now possess the Fresh River have torn them down and carved a ridiculous face in their place."⁴

Having driven the Dutch back to the west end of the Sound, the English also dealt firmly with the natives. With the spread of European diseases among these people with no immunities, and the Pequot War of 1637 which eliminated the most warlike of the natives in present Connecticut, the coastal living patterns of several hundred years changed completely.

A separate colony of devout Puritans led by the London merchant Theophilus Eaton and the Reverend John Davenport settled at New Haven in 1638. This group included the wealthiest men yet to settle in New England, and they had strong commercial intentions. Their expansionist tendencies nearly turned Long Island Sound into New Haven's inland sea. On the Connecticut coast, the colony of New Haven eventually stretched from Guilford west to Stamford. New Haveners did their own colonizing, purchasing land on Long Island from the Earl of Sterling and establishing a settlement at Southold in 1640.

Foiled in their efforts to build a strong commercial colony, a failure that was epitomized by the loss of the "Great Shippe" sent out to establish trade with Great Britain in 1647, New Haven Colony languished. Long Island Sound became a barrier rather than a great highway to the world.

In 1663, when Governor John Winthrop of Connecticut returned from England with the most liberal charter issued by the Crown to a North American colony, New Haven was nearly convinced to merge with Connecticut, despite that colony's looser theology. Then, with the surrender of the Dutch at New Amsterdam in 1664, New Haven was faced with the alternative of absorption into the Duke of York's claim. Swallowing their scruples, the New Haveners joined Connecticut.

In the process, New Haven gave up its inland sea. Southold was ceded to New York, and the Sound itself came under New York's jurisdiction. For the next 215 years Connecticut's boundary would be at the water's edge.⁵

In the eighteenth century, Connecticut was a virtually self-governing colony lacking only a lucrative transatlantic trade to make it a perfectly contented member of the British Empire. Without resources comparable to the timber of northern New England, the fish of Massachusetts, the grain and furs of the New York and Philadelphia hinterlands, or the tobacco of the South, Connecticut had little to exchange for the British-manufactured goods, from glass to fine fabrics, that her residents demanded.

The solution, which was less than ideal, drained Connecticut of both its produce and its specie, which flowed in two directions on Long Island Sound. The more lucrative branch of the system linked Connecticut with the British (and French) island colonies of the Caribbean. Since the introduction of sugar cane to the islands in the 1600s, Connecticut had discovered there a ready market for its agricultural surplus. Foodstuffs—grain, cheese, onions, preserved meat and live sheep, hogs, and fowl—went south to feed the island populations. Livestock-horses and oxen—went as draft animals and to produce manure for the cane fields. Lumber, and even house frames, went to build up the thriving islands, especially after they were levelled by hurricanes. The brigs, sloops, and schooners that left New London or New Haven for the West Indies resembled floating barnyards more than trading vessels.

By the mid-eighteenth century Barbados was the destination of choice. Like trade-wind peddlers, the Yankee skippers would begin at this large,

windward-most island and then wend their way through the Caribbean chain until they had dispensed their produce and loaded sugar, molasses, and rum. Part of this West Indian produce was consumed at home and part was added to the local produce in the other branch of Connecticut's trade.

This second component of Connecticut's colonial trade made her a virtual economic colony of Boston, and later New York. These large cities could assemble cargoes suitable for the mother country, which gave them the credit necessary to import European goods. It is fitting that Connecticut borrowed her neighbor's watery highway for approximately one-third of Connecticut's total commerce was with New York (see Table 1).

TABLE 1
THE MARITIME TRAFFIC OF COLONIAL NEW HAVEN,
CONNECTICUT⁶

	1768	1773
	(% of total)	(% of total)
TOTAL ARRIVALS	188	221
TOTAL DEPARTURES	183	255
NORTH AMERICAN ARRIVALS	112 (60)	140 (63)
NORTH AMERICAN DEPARTURES	109 (60)	132 (52)
Arrivals from New York	62 (33)	77 (35)
Departures for New York	55 (33)	73 (29)
Arrivals from Boston	31 (16)	31 (14)
Departures for Boston	32 (17)	34 (13)
WEST INDIES ARRIVALS	75 (40)	81 (37)
WEST INDIES DEPARTURES	72 (39)	120 (47)
Arrivals from Barbados	10 (5)	4 (2)
Departures for Barbados	38 (20)	75 (29)
EUROPEAN ARRIVALS	1	0
EUROPEAN DEPARTURES	2 (1)	0

A few Connecticut merchants attempted to create a direct trade with Europe. New London succeeded on a small scale, but New Haven was singularly unfortunate. An attempt in 1749 to enter the trade in Central American logwood, which was highly valued as a dye-wood in Europe, was nullified by an unreliable captain. In the late 1760s New Haven tried again with potash and flax seed, but the return cargo from Ireland arrived during the nonimportation agreement in response to the Townshend Acts, so the voyage failed to produce a profit. It is hardly surprising, then, that Long Island Sound became more and more a local route between Connecticut and New York. Writing with bitter sarcasm in 1772, a Connecticut observer foresaw Connecticut selling itself into slavery to the shrewd New York merchants, who:

have found their Guinea [slaving] voyages costly and dangerous, and have entered upon a plan to set up a slave trade nearer home, in

neighbouring colonies. They have subtilly for many years past, drained Connecticut of all their loose corns of produce and cash, and now are making a further advance on their substance. They well understand Connecticut people's foppery, and luxury, and that they carry on a trade but just beyond the end of their noses, to support themselves in it....And therefore the Yorkers have pitched on Connecticut as the chief mart in the slave trade.⁷

The American Revolution upset all of these trading patterns. With New York and Long Island in loyal hands for most of the war, Long Island Sound became a no-man's land. Raiding parties in small, maneuverable whaleboats sped across it to plunder Long Island, and retaliatory attacks were aimed at the Connecticut coast. In 1779 a British Royal Navy flotilla appeared on the Sound and sent raiding parties into New Haven and Fairfield County.⁸

Following the war, the new nation was excluded from its old trading grounds in the British West Indies. Connecticut, like the other maritime states, scoured the world for trading opportunities. New York remained Connecticut's principal market, but more colorful were the sealing expeditions undertaken around 1800. Seals butchered on the Patagonian coast of South America produced pelts that could be traded in China for tea, porcelain, and luxury items.⁹

Connecticut also entered the whaling industry. Bridgeport and New Haven were involved on a small scale while New London, Mystic, and Stonington had sizable fleets. By 1846 New London had surpassed Nantucket as America's second-largest whaling port. Whales were hunted in the North and South Pacific, and the eastern Arctic, for their oil and baleen. New York supplied many of the unskilled, greenhands for this sweated form of maritime labor, and much of the resulting oil and bone rode back down the Sound to processors and wholesalers in New York.

Connecticut shipbuilders tapped into the prosperity of New York by supplying vessels for the expanding American merchant marine. Yards at Black Rock, New Haven, Madison, Essex and other Connecticut River ports, New London, and Mystic, produced numerous merchant ships before the Panic of 1857 and the Civil War began the contraction of America's deep-water merchant marine. Thereafter a few yards built schooners for coastal trade.

Connecticut ports actually saw an increase in maritime traffic late in the nineteenth century as coal became the fuel to drive industry. A steady stream of schooners brought this commodity to Northern ports from Philadelphia, Baltimore, and Norfolk. In the twentieth century, fuel oil carried in tankers has replaced coal as the principal commodity to travel Long Island Sound on shipboard.¹⁰

Soon after the Revolution, Long Island Sound became a funnel for more than just the Connecticut specie and produce bound for New York. Inland youths who sought their fortunes in Connecticut's commercial centers learned of broader opportunities in the world port to the west. Some no doubt worked their passage there as deckhands aboard the local sloops

and schooners that made regular runs up and down the Sound. Likewise, coastal Connecticut boys, if they had no connections in their native towns, found better chances to ship out from New York or to find introductory employment in South Street countinghouses.

This migration of talent began in earnest in the 1790s, with the arrival of such men as brothers George and Nathaniel Griswold of Old Lyme. By 1796 they had established themselves as N.L. & G.G.—“No Loss and Great Gain” it was sometimes said to signify—Griswold in New York City. Beginning as brokers for Connecticut produce, they expanded into South American trade and the China tea trade with great success. Joseph Howland, a Norwich merchant, moved to New York shortly after 1800. His own success was eclipsed by that of his sons, Gardiner G. and Samuel S. Howland, who prospered in South American trade, and were succeeded by Gardiner’s son William and his nephew William H. Aspinwall of Long Island. Their firm, Howland & Aspinwall, traded widely in South America and China, developed some of the earliest clipper ships in the 1840s, established the Pacific Mail Steamship Company just as gold was discovered in California, built the crucial Panama Railroad across the isthmus, and were major bankers in New York.

Another Connecticut native who made his fortune in New York was Charles Morgan of Killingworth, who began as a grocery clerk upon his arrival in 1809, was operating steamboats to Texas by 1840, and had become the kingpin of the Gulf Coast steamship and railroad network in the 1870s.

Although this trend appears to have drained Connecticut of her talented young entrepreneurs, in fact they were an insidious group who captured the city’s finances while remembering their homeland. An example is Anson G. Phelps, an orphan from inland Connecticut who came to New York in 1812 after establishing a successful saddlery. He began importing copper and other metals, shipping cotton to Europe in exchange. With his son-in-law, William E. Dodge, also a Connecticut expatriate, he established Phelps, Dodge & Co., the large metals corporation. Phelps tried to reverse the flow by encouraging the copper and brass industry in Connecticut, particularly in the town renamed Ansonia in his honor.¹¹

A new era in travel on the Sound began on 21 March 1815, when the steamboat *Fulton* departed New York, crept through Hell Gate, and landed at New Haven after an eleven-hour passage. This was phenomenal time in an era when the stage trip took nearly two days and a sailing packet could take even longer if wind and tide did not cooperate. The thirty passengers who paid five dollars—almost three days’ pay for a laborer—were followed by many others as the *Fulton* began regular service two or three times a week, except in winter. In 1818 the *Fulton* opened service between New Haven and Norwich, while the Connecticut entered service as the link between New York and New Haven. But this key link was interrupted in 1822. New York had awarded Robert Fulton and Chancellor Livingston a monopoly on steamboat transportation in New York waters, which excluded any Connecticut steamboat company from competing. In

retaliation, Connecticut prohibited Fulton Livingston boats from landing in Connecticut. Until the Supreme Court ruled in *Gibbons v. Ogden* (1824) that a state did not have the authority to regulate interstate commerce, this legislative standoff hobbled steam navigation on the Sound.¹²

As important as New Haven was, the real demand for steamboat service on the Sound was as a timely link in the route between New York and Boston. In the late 1830s the routes began to fluctuate as new rail links were established. First Providence (1835), then Stonington, to avoid the steamship passage round Point Judith (1837), then Norwich (1840), and finally Newport and Fall River (1847) became crucial steamboat-railroad interchanges. Even after the Thames River, the last impediment to a through coastal rail line, was bridged in 1889, the amenities of the steamboats, with their luxurious accommodations, fine food, and amusements attracted both upper and lower echelons of New York and Boston travelers. Despite the fiery destruction of the *Lexington* and nearly 200 passengers and crew on a wintry night in January 1840, and the loss of 27 lives in a collision between the *Narragansett* and *Stonington* in June 1880, steamboat service was far more comfortable and safe than was railroad travel in the nineteenth century.

By the 1880s the Sound steamboat lines had a new significance as the prime movers of raw materials and finished products between the port and markets of New York and the manufacturing centers of Connecticut, Rhode Island, and Massachusetts. The convenience and economy of waterborne transportation of raw materials on the Sound had contributed to the growth of the textile industry in southern New England before the Civil War. After the war, New York took the lead in distributing textiles and in manufacturing ready-made clothing, which encouraged further expansion of the local industry. Even the textile and shoe industries of northeastern Massachusetts, and the paper industry of Maine, became dependent upon the rail-steamboat network for timely and inexpensive shipment of their goods down the Sound to the great market of New York.¹³

The fierce steamboat competition of the first forty years of Sound steamboating was calmed by rate agreements in the 1870s. During the next twenty years, in a tangle of takeovers and lease agreements, a super railroad emerged in southern New England: the New York, New Haven & Hartford. Far from viewing the steamboat lines as competition, the New Haven sought to acquire and integrate them into a vast, regulated system in conjunction with the railroads. One by one the lines serving Connecticut and Rhode Island were taken over and manipulated to drive out competition. By 1900 the system was a virtual monopoly, but it also provided good, reliable service for New England shippers. As part of the New Haven system, which began to topple during its anti-trust case of 1912-16, the steamboat lines found a last great era of prosperity during the economic boom of the First World War.

Sound steam navigation was crippled and then killed by fundamental changes in New England following World War I. New England manufacturing went into decline in the 1920s as the textile industry began to move

south and other industries abandoned the region. In addition, the perfection of the motorized truck during the war offered the remaining industries a new, more mobile alternative to the railroad-steamboat system. Passenger trains, busses, and the Great Depression also cut into the revenues of the passenger steamers. New Haven and Bridgeport lost their lines to New York in 1920, just a few years more than a century after the first steamboat called at New Haven. The Hartford line was terminated in 1931, and the New London line in 1934, which ended Sound steamboating in Connecticut. (The last Sound steamboat ran between New York and Providence in 1942.)

A cross-Sound transportation network was developed also. At least until the railroad reached eastern Long Island in 1844, Sag Harbor and its environs had stronger ties to New London than to New York, as evidenced by the regular sailing packet connection begun in the eighteenth-century. A Greenport-Stonington steamship line was established with the completion of the Long Island Railroad, and it was superceded by local Hartford-New London-Sag Harbor steamer service. This crucial eastern cross-Sound connection is maintained by the present New London-Greenport auto ferry. The only remnant of the western cross-Sound ferries is the Bridgeport-Port Jefferson linkage, established in 1873.¹⁴

Recreation on the Sound has been a recognized activity for about 150 years. As integral as recreation was to the Industrial Revolution, it is fitting that the steamboat opened up the recreational potential of Long Island Sound: on the one hand allowing many persons to reach otherwise inaccessible coastal locales; on the other, providing recreation and diversion in the form of waterborne excursions. The steamboat *Fulton* offered the Sound's first excursion trip with a run from New Haven to Hartford in May 1815.¹⁵

Resorts, such as New London's Ocean Beach, developed in the 1840s. For the less wealthy, who also sought relief from stifling summer heat along the shore, public beaches and parks were created, probably beginning with Bridgeport's Seaside Park, donated to the city by P. T. Barnum in 1865. By the last decades of the nineteenth century New Haven was served by the beach and amusement complex at Savin Rock. In the twentieth century the state began to create some waterside recreation areas. Hammonasset Beach State Park was established at Madison in 1919. The automobile, which helped kill the steamboat, helped these seaside parks thrive. As early as the 1930s Hammonasset served 1.5 million visitors a year.¹⁶

The New York Yacht Club, organized in 1844, established organized yachting as an American pastime. The club sponsored races for its members and, from its earliest days, held an annual cruise that took its fleet up the Sound. In the 1870s and early '80s yachting became a more exclusive reserve of the very wealthy, who built large and ostentatious steam and sailing yachts operated by paid crews. In reaction to this, and as a reflection of the increased leisure time among urban dwellers, came the Corinthian, or amateur, movement. With that, the number of American yacht

clubs almost doubled from about forty in 1881 to ninety-one in 1889.¹⁷

Other than Norwich's Chelsea Boat Club of 1877 (which was not considered a true yacht club until later), the New Haven Yacht Club of 1881 established organized yachting in Connecticut. By 1889 Connecticut had five clubs, and the number increased to twenty-one by 1919. The populous cities of western Connecticut led the way: Norwalk had five clubs while Bridgeport and New Haven each had four. Reflective of the rise of summer resort communities along the Sound were the Fenwick (Saybrook) station of the Hartford Yacht Club, established in 1895, and Guilford's Sachems Head Yacht Club of 1896.¹⁸ To this day, yachting remains one of Connecticut's closest ties with Long Island Sound.

Like their native predecessors, colonial settlers in Connecticut were drawn to the natural resources of the Sound. For them it was not just a highway, it was a productive garden of protein. Migratory fin-fish swept through the region from April through November. The shad and Atlantic salmon runs up the principal streams made fishermen out of the local farmers. Either as individuals or as loosely constituted fishing companies, and sometimes with distinct fishing stations and regulations proscribed by their communities, they set their haul seines or gill nets to ensnare the passing fish. Through the late colonial period, shad were so common that they were considered poverty food.

By the 1830s Connecticut fishermen had adopted the fish trap or pound, a series of nets set on poles that channeled fish into a net enclosure. This passive, stationary device was capital intensive but labor saving and much more efficient than hook-and-line methods. Shad, salmon, menhaden for fertilizer, and other species were caught in great numbers by the traps. The traps were so efficient at intercepting schools of fish swimming alongshore that, in an effort to reestablish salmon in the Connecticut River, the Connecticut legislature in 1868 temporarily banned their use around the mouth of the river, where they would decimate the shad and salmon runs, as well as cutting into the livelihood of the river fishermen.¹⁹

But competing uses of the water were also decimating the fish populations. Small streams had been dammed to provide water power for industry from the earliest colonial years, but in 1795 the Connecticut River itself was dammed at South Hadley, Massachusetts. This migratory obstacle, and the increasing damming of Connecticut River tributaries and other rivers, cut off Atlantic salmon from their breeding streams. By the 1880s the fish was virtually extinct in Connecticut.

The most prolific migratory fish in Long Island Sound was also the basis of Connecticut's most lucrative fin fishery. The oily, bony menhaden had little use as food but was an excellent source of fish-meal for fertilizer. An organized fishery was underway by the late 1830s, and steam-powered vessels were added in the 1870s. Factories along the coast between Milford and Stonington processed the fish, which were caught in vast numbers in purse-seine nets. Public opposition drove most of the noisome factories from Connecticut by the 1930s, but southern menhaden boats still cruise the Sound on occasion to meet the demand for chicken feed and cat food.²⁰

By late in the colonial period, the natural estuarine oyster beds that had helped sustain the Native Americans were largely depleted. As early as 1750, Connecticut had recognized the jurisdiction of each town over the shellfish in its waters. In 1762 New Haven enacted restrictions on oyster harvesting to protect the resource in the harbor's natural beds. By 1830, some Connecticut oystermen had begun resorting to the rich oyster beds of Chesapeake Bay. First they sold the oysters directly upon their return to the North. Soon, however, they were bringing them up in the spring to fatten in New Haven Harbor before being harvested for sale in the fall.²¹

Transplanting of such oysters became common, and Connecticut state law began to recognize the right of individuals to private control of portions of the submarine bottom, in contradiction to the historic precedent of the sea bottom as public property. The two-acre law of 1855 allowed towns to grant two-acre, or less, parcels to individuals. Town taxes were imposed on the grants after 1864, and after 1915 ground was leased for ten years rather than granted in perpetuity.

By the 1870s all the suitable inshore bottom was claimed and oystermen began to eye the deeper waters of the Sound. This became more feasible when New York and Connecticut readjusted the state boundary toward the center of the Sound in 1881. That year the Connecticut State Shell-Fish Commission was established to oversee the industry. In 1888 nearly 87,000 acres of oyster ground were privately held in Connecticut.

Early experiments at laying down "cultch"—old shell to serve as a substrate for juvenile oysters to set upon—and spawning oysters on barren bottom in the 1850s had been successful, and in the 1880s the Connecticut bottom of western Long Island Sound became a vast nursery for oysters. Seed stock was dredged off the natural beds by sailing sloops, or off private beds by the new oyster steamers. Between a successful "set" of oyster larvae and their harvest for market, when they were four years old and three or four inches long, the oysters might be moved several times: first to deep, safe growing beds offshore, then to rich fattening beds in the estuaries. This highly refined form of mariculture reached its peak in Connecticut about 1898, when fifteen million pounds of oyster meats were harvested in the state.

Thereafter, production declined rapidly as pollution destroyed inshore grounds and repeated poor annual sets further reduced the supply. Later in the twentieth century hurricanes buried some of the surviving natural beds. Yet, since the once great Bridgeport-Stratford natural bed became unworkable in the early 1960s, the oyster industry has been able to begin a resurgence in the waters off Norwalk, Bridgeport, and New Haven.

Other forms of fishing have linked Connecticut to the Sound more recently. In this century the otter trawl fishing net and motor-powered fishing vessel have changed the species of fish brought to market. With the resultant increase in flounder landings, portions of the Sound became productive fishing ground, with current landings in Connecticut totaling more than 5 1/2 million pounds per year. Lobstering too has become more intensive throughout the Sound as market prices have risen. The limited

supply has led to recent conflict between lobstermen and draggers who fish on the same bottom. Recreational or sport fishing far exceeds commercial fishing on the Sound. More than a quarter of a million anglers pull in close to twenty million pounds annually.

For Connecticut, Long Island Sound has been literally an agent in its own near destruction. As a highway it contributed to the growth of an industrial complex with a dense operative population and an increasing waste problem.²² As a seemingly limitless basin, it appeared ready to accept the wastes of a population growing faster than anyone had planned. Now it is increasingly recognized within Connecticut that, after serving Connecticut for three and a half centuries, it is time for the Sound to be served by that State. Yet this effort cannot succeed on a strictly independent basis. By the late 1980s, a population of five million resides within fifteen miles of the Sound, and more than fourteen and a half million live in its drainage basin. This figure is nearly five times the population of Connecticut. And the roughly two billion dollars estimated to be needed for "cleaning" the Sound is a daunting price.

The Sound represents a complex natural system that is being degraded by multiple causes. Yet, as interrelated as these causes are, they can be addressed under three headings: coastal development, toxic waste, and human sewage. With a population density of 637 people per square mile, Connecticut puts great pressure on its coastal acreage. Between Connecticut and Long Island, barely 7 percent of the shoreline is undeveloped, and public access is limited to discrete state and municipal beaches and recreation areas. Such demand for water access is incompatible with the marshlands that comprised much of Connecticut's natural shoreline. Until barely a quarter of a century ago, salt marshes and tidal mud flats were considered wasteland ripe for development. In 1956 the State of Connecticut itself, despite local protest, filled acres of salt marsh incidental to the construction of Interstate Route 95. Awareness of the vital role of salt marshes as a buffer and filtering mechanism, as well as a nursery for marine organisms, has increased since that time, and they are now legally protected, but not before at least half of Connecticut's salt marshes had been destroyed. Even now, the demand for coastal residences and expanded marina facilities pressures the remnants of the natural coastal system.

In the nineteenth century it had already become apparent that industrial wastes could contaminate rivers and harbors rich in edible marine life, but the problem was localized and the impact was considered relatively minor. The heavy metals of that era have been superceded by the organic compounds of the petroleum era. Some of these, like fuel oil, will devastate the marine environment directly. Others are absorbed, only later to threaten human users of the Sound's food resources.

Polychlorinated biphenyls (PCBs) are but the worst of a set of carcinogenic compounds that are ingested by lower organisms and become concentrated in the tissues of larger members of the marine food chain. Worrisome too are the unspecified elements that leach out of solid waste dumps ashore, some of which were callously located on former salt mar-

shes and now rise like monumental mounds of human waste.

Yet, dramatic improvements are possible. Through the 1960s enough of the agricultural pesticide DDT leached into the Sound to impair the production of egg shells by the osprey, a marine bird of prey. Within two decades of the elimination of the use of DDT, ospreys are now becoming common along the Sound again. Human sewage is the most insidious threat of all. In its obvious form, it prevents humans from swimming in the waters of the Sound. But the annoyance of lost recreation is nothing compared with the basic changes in the Sound's organic balance that sewage may create. Presently forty-four sewage treatment plants discharge into the Sound. Some of these sewage systems are antiquated and insufficient for the populations they now serve. When stressed, they pour raw sewage into the Sound. Even the best of the systems pour forth huge quantities of nitrogen and phosphorus. By their very volume these fertilizers become toxic, causing algae to bloom far beyond the natural rate in summer. When these blooms die and begin to decay they deplete the dissolved oxygen content of the water. The resulting hypoxia is fatal to other marine organisms. So far hypoxia is an intermittent summer condition in parts of the western Sound, but if it were to become chronic the whole body of water could become a stinking dead sea.

A system that has evolved over 10,000 years is now threatened by the accumulated abuse of less than 350 years. Though the Sound is no longer Connecticut's crucial highway to the world, humans continue to ride roughshod over it. At the same time, as computer modeling of the Sound's mechanisms attempts to predict solutions, and as citizen groups, the Long Island Sound Taskforce, the Sound's Conservancy, and other organizations seek to focus public attention on the dire needs of the Sound there is increasing hope for its recovery.

Public concern is beginning to be felt in the state legislature, but good will has not yet been turned into dollars. It will not happen until Connecticut's residents realize that they have a permanent relationship with the Sound.

Perhaps Long Island Sound is still serving Connecticut. Perhaps it is now a mirror that reflects our ills and challenges us to face them.

NOTES

1. Two works that deal with Long Island Sound as a whole are Marilyn E. Weigold, *The American Mediterranean: An Environmental, Economic & Social History of Long Island Sound* (Port Washington, N.Y.: Kennikat Press, 1974), and Fessenden Blanchard's cruising guide, *Long Island Sound* (Princeton: D. Van Nostrand, 1958).

2. The Native American history of Connecticut is still being written as more archeological evidence is unearthed. The subject is covered in outline form in Albert Van Dusen, *Puritans Against the Wilderness: Connecticut History to 1763* (Chester, CT: Pequot Press, 1975).

3. Johan de Laet, "Nieuwe Wereldt," 1625, 1630, Book III, "Virginia," Sect. "Nieuw-Nederlandt," in J. Franklin Jameson, ed., *Narratives of New Netherlands, 1609-1664* (New York: Barnes and Noble, 1937), 44.

4. Jameson, *ibid.*, 309.
5. This is outlined in Van Dusen, *Puritans*.
6. Compiled by the author from customhouse listings in the weekly New Haven newspaper, the *Connecticut Journal*. These sample years suggest the trend of the late colonial period.
7. *Connecticut Journal*, 8 May 1772; useful sources for the dilemma of Connecticut's colonial maritime economy are Van Dusen, *Puritans*, Roland M. Hooker, *The Colonial Trade of Connecticut* (New Haven: Connecticut Tercentenary Commission, 1936); John J. McCusker and Russel R. Menard, *The Economy of British North America, 1607-1789* (Chapel Hill: University of North Carolina Press, 1985); and I discussed the 1749 logwood voyage in *Thomas Darling (1720-1789): A Man of Integrity and Uprightness* (Woodbridge, Connecticut: Amithy & Woodbridge Historical Society, 1988).
8. See John Gardner, "Whaleboat Warfare on the Sound," *The Log of Mystic Seaport* 28:2 (July 1976): 59-68.
9. The sealing industry, in which Connecticut played a large role, is described in Briton C. Busch, *The War Against the Seals: A History of the North American Seal Fishery* (Kingston and Montreal: McGill-Queen's University Press, 1985).
10. For these themes, see *Shallops, Sloops and Sharpies: A Maritime History of New Haven* (New Haven: New Haven Colony Historical Society, 1976); Robert O. Decker, *The Whaling City* (Chester, CT: Pequot Press for the New London County Historical Society, 1976); and James P. Baughman, *The Mallorlys of Mystic: Six Generations in American Maritime Enterprise* (Middletown: Wesleyan University Press for Mystic Seaport Museum, 1972).
11. Robert G. Albion, *The Rise of New York Port* (New York: Charles Scribner's Sons, 1939), 241-50.
12. See Sidney Withington, "Steamboats Reach New Haven: A Brief Survey of Early Steamboat History on Long Island Sound," in *Papers of the New Haven Colony Historical Society*, vol. 10, (New Haven: New Haven Colony Historical Society, 1951), 147-87; an anecdotal history is Roger Williams McAdam, *The Old Fall River Line* (New York: Stephen Daye Press, 1955).
13. The best analysis of the railroad-steamboat network is William L. Taylor, *A Productive Monopoly: The Effects of Railroad Control on New England Coastal Steamship Lines, 1870-1916* (Providence: Brown University Press, 1970), 125-27.
14. Ralph Henry Gabriel, *The Evolution of Long Island: A Story of Land and Sea* (New Haven: Yale University Press, 1921; reprint ed., Port Washington: Ira J. Friedman, Inc., 1960), 129-30.
15. See Withington, "Steamboats," 158.
16. Works Projects Administration, *Connecticut: A Guide to its Roads, Lore, and People* (Boston: Houghton Mifflin, 1938), 126; *The Connecticut Guide* (Hartford: Emergency Relief Commission, 1935), 49.
17. See John Parkinson, Jr., *The History of the New York Yacht Club* (New York: New York Yacht Club, 1975); yacht clubs of the 1880s are listed in Manning's *American Yacht List*, 1881, 1889.
18. *Lloyd's Register of American Yachts*, 1919.

19. U.S. Commissioner of Fish and Fisheries, *Report on the Condition of the Sea Fisheries of the South Coast of New England in 1871 and 1872* (Washington, D.C.: Government Printing Office, 1873); Connecticut's early fisheries are covered in the greatest depth in George Brown Goode, *Fisheries and Fishery Industries of the U.S.*, 5 vols., (Washington, D.C.: Government Printing Office, 1887), see vol. 5, sect. 1.

20. The Connecticut menhaden story has not been fully told, but useful sources are Goode, *ibid.*, and William N. Peterson, "'Bony-Fish': The Menhaden Fishery at Mystic, Connecticut," *The Log of Mystic Seaport* 33:1 (Spring 1981): 23-36. For the Long Island aspect, see "Menhaden Fishery," in *Bi-Centennial: A History of Suffolk County* (Babylon, 1885), Appendix B, 98-103.

21. The best studies of Sound oystering are John M. Kochiss, *Oystering from New York to Boston* (Middletown: Wesleyan University Press for Mystic Seaport Museum, 1974), and Lawrence J. Taylor, *Dutchmen on the Bay: The Ethnohistory of a Contractual Community* (Philadelphia: University of Pennsylvania Press, 1983—see Professor Taylor's article in the current *LIHJ*.

22. For the background on environmental issues see Weigold, *American Mediterranean*; the immediate issues are discussed in the newsletter of the Long Island Sound Taskforce of the Oceanic Society and *Long Island Sound Study Update* vol 1 (Stamford, CT, 1988-).

The Brooklyn Bridge in Literary and Popular Imagination

By Bernice Braid

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The story of the Brooklyn Bridge, its builders and its designer, has from the start been of epic proportions. John Augustus Roebling, the German immigrant whose vision became the look of the Bridge, died in 1869 from an accident on the construction site. His son and colleague, Colonel Washington A. Roebling, took over the project, was crippled in 1871 by the bends while fighting a fire in the caisson, and completed his father's masterpiece from home in 1883, with the help of his wife—Emily Roebling—and the loyal support of his workers. The bridge, a complex and beautiful product of a complex and exquisite imagination, was profoundly of and far ahead of its time. In its structure and design, wrote Lewis Mumford, "the architecture of the past, massive and protective, meets the architecture of the future, light, aerial, open to sunlight, an architecture of voids rather than solids."¹

Mumford was far from alone. Records of the bridge as Eighth Wonder of the World abound in popular culture, exemplified by an endless production of tourist postcards and souvenirs. All the material evidence points to what might be called the super-reality of a construction which has become a transcendent symbol of the period in which it was built. For Brooklynites and the world at large, the bridge stands for power: manpower, machine power, American power; for vigor and youth and visionary expectations; maybe even for faith. The artifacts, both souvenirs and studies, lead to an overwhelming sense of the bridge as representative of American culture. The literature and art it provoked suggest another dimension of meaning—that John A. Roebling built into his bridge a synthesized sense of the world, seeded by his early European training and incorporated into the visualization of that synthesis. The bridge stands, in all its delicacy and solidity, as a brilliant summary of the Romantic Ideal. It offers a fine opportunity to examine the ways in which art and artistry express attitudes 'in the air' during moments of cultural ferment.

By the mid-nineteenth century, Brooklyn was emerging from the mists of early settlement into a territory ripe for expansion. Although difficult to reach easily or on schedule, it enjoyed a tenfold rise in factories built, from fewer than 500 to more than 5000 between 1860 and 1880.² Neither Manhattan nor Brooklyn fancied a real merger, blending identity and economy, but as early as 1800, and more persistently by 1860, the subject

came up of joining the two by an elevated roadway, a union linked to development and real estate values.³

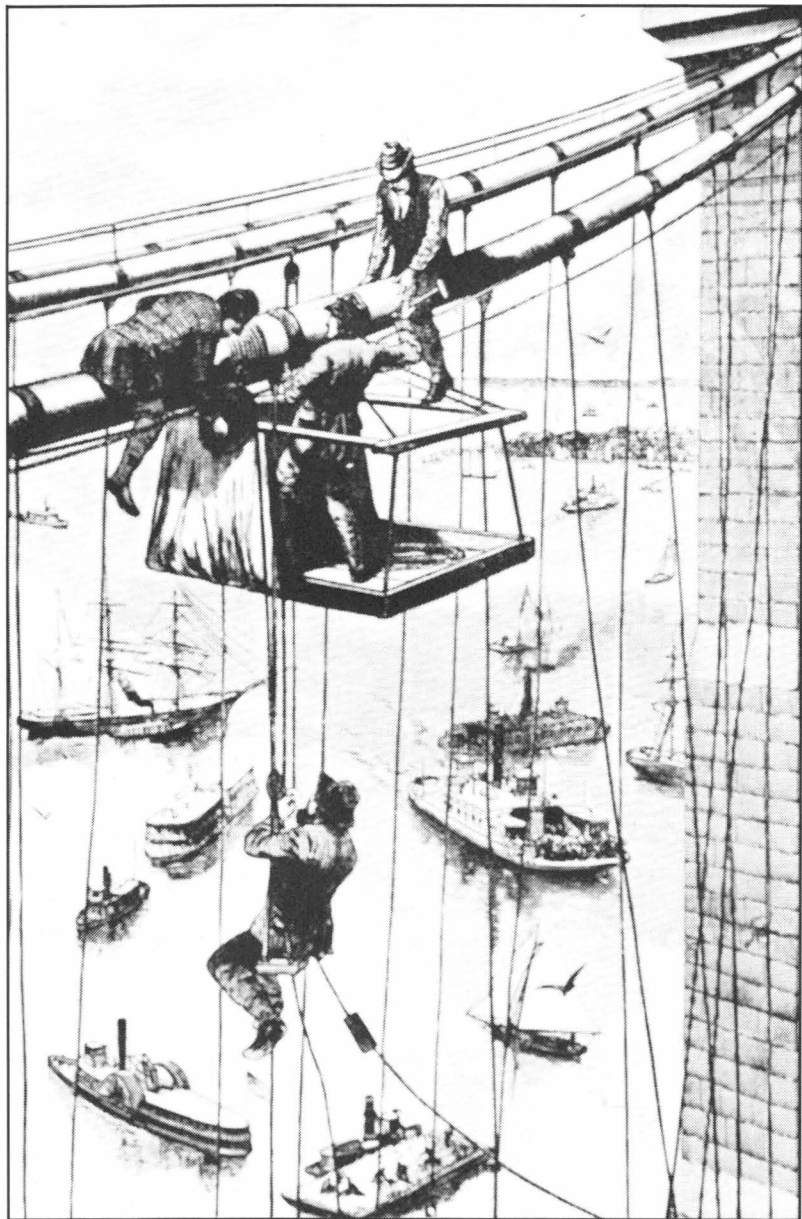
The wording of the proposals was both pragmatic and hyperbolic. An 1829 plan called for a chain suspension bridge 2100 feet long, rising 160 feet above the East River. One supporting argument was that property values would surge, another that the bridge would provide a monument on so grand a scale that New York, like London, forever would be tied in the world's imagination to a city across the waters. An 1835 proposition urged a suspension bridge as not only practical from the viewpoint of sound engineering and considerations of water traffic, but also to be "one of the most magnificent suspension bridges in the world."⁴

In preparing the public for his design and justifying its various phases, Roebling followed this pattern of argument. Fundamental to his plan was the carefully worked out economic issue based on the question, "Will the work pay the investment?" He also raised the matter of "magnificence" to a conception of the monumental utterly his own. His formal proposal of 1867 to the New York bridge Company began with these words:

The contemplated work, when constructed with my designs, will not only be the greatest bridge in existence, but it will be the greatest engineering work of this continent, and of the age. Its most conspicuous features, the great towers, will serve as landmarks to the adjoining cities, and they will be entitled to be ranked as national monuments. As a great work of art, and as a successful specimen of advanced bridge engineering, this structure will forever testify to the energy, enterprise and wealth of that community which shall secure its erection.⁵

Would whatever bridge first to cross the East River have been, by definition, magnificent? monumental? a work of art? Possibly. It is a large body of water, and New York, when this debate began, was well established as a pivotal market town. But not necessarily would any structure be deemed all these things, no matter how central its economic and political role. All the elements of *this* bridge—the Great East River bridge, the Brooklyn bridge, THE bridge—combined to make it from the start the monument Roebling desired and the work of art he designed, so carefully conceived and executed that it epitomizes power and beauty in one great orchestrated harmony.

Its power derives from several elements. There is the saga of its construction, the workers who died or were maimed to build it now firmly rooted in folklore, their stories told a century later on every voyage around Manhattan. The death of John A. Roebling and the crippling of Washington Roebling, his son, almost seem in the popular mind to be a propitiation of the gods of the river. There is also the historical moment as such, when the superimposition of the hand of man on the face of the earth was seen as a sign of tremendous significance, a real promise of a new world. Finally, the breathtaking power of the design makes the bridge irresistible to the imagination.



Attachment of steel rope suspenders from cables.

Steel engraving, Harper's Weekly, ca. 1880.

What did the idea of bridges mean in the 1870s, while construction was at its peak? Ample evidence suggests that by the 1860s technology was emerging as America's new frontier, the ultimate expression of the nation's high destiny. The westward movement, the railroad network, the telegraph, and the roads themselves were what Walt Whitman called "The earth to be spann'd, connected by network....The lands to be welded together."⁶ The steel wires, the roadbeds, and trains all seemed logical expressions of America's raw energy transmuted into the power that binds over enormous spaces. Even the trauma of civil war appeared reparable in the light of such frenzy to tie together and build after 1865.

It is not surprising, then, to hear echoes of this specific historic triumph in the rhetoric of opening day ceremonies, May 24, 1883. To the Reverend Richard S. Storrs, the bridge represented the victory of man's will over recalcitrant and sluggish forces of nature: "... the future of the country opens before us, as we see what skill and will can do to overleap obstacles, and make nature subservient to human designs."⁷ Arthur Miller, almost one hundred years later, said that the bridge "...seemed to hold a certain promise that we could build a society that would work and that would be inspiring at the same time."⁸

Emblems of man's triumph over nature is a theme in both Whitman and Hart Crane; each speaks of the power associated with the bridge as manifestation of technology. In "Song of the Exposition," Whitman argues that the magnificence of the old world by now is locked away in its ruins:

Silent the broken-lipp'd Sphynx in Egypt, silent all those
century-baffling tombs,
Ended for aye the epics of Asia's, Europe's helmeted
warriors...

"We do not blame thee elder World," but we must build our world, today, implicitly new. Our world, our answer to the castle-keeps and ruined fortresses, contends Whitman, is the new technology. Old world stones lie crumbling; new world steel is what's wanted:

We plan even now to raise, beyond them all,
Thy great cathedral sacred industry, no tomb,
A keep for life for practical Invention.

Whitman's "keep for life" is the practical, the network of roads and bridges, the steel and concrete which are the promise of the endlessly new.

With latest connections, works, the inter-transportation of
the world,
Steam-power, the great express lines, gas, petroleum,
These triumphs of our time, the Atlantic's delicate cable,
The Pacific Railroad, the Suez Canal, the Mont Cenis and

hard and Hoosac tunnels, the Brooklyn Bridge,
 This earth all spann'd with iron rails, with lines of
 steamships threading every sea,
 Our own rondure, the current globe I bring.⁹

The meaning of Brooklyn Bridge to poets as an objective correlative of transcendence, as the triumph of youth over age, and of energetic expansion is apparent in the elation expressed by its transmitted strength. For John Roebling it was a chance to solve large and demanding problems in a way that would be a permanent gift to his adopted city and country. For residents of the cities across the water from one another it was a link likely to produce growth, wealth, and comfort. For first viewers of the structure it was both dreamlike vision and dream come true. Ellen Terry spoke for more than herself when, in 1884, she wrote that she would never forget how the bridge looked in winter, "a gigantic trellis of dazzling white, as incredible as a dream... It looks as if it had been built by some power, not by men at all."¹⁰

Poets and painters were extraordinarily susceptible to this power from the time the structure rose from the waters and took on visible shape. Transcendent qualities of the bridge, which speak directly to artistic sensibilities, are inherent in Roebling's design because he had a mission as well as a vision: he saw himself as a builder of a monument in his capacity as engineer, and as a creator of a work of art in his capacity as artist. Consider the usual descriptive terms: lace trellis, cobweb, or harp, to convey the patterns of interwoven, delicate steel cables perceived as almost celestial; the power and glory associated with the solid towers and Gothic arches symbolic of permanence and spirituality; and a sense of being uplifted by the impact of composite impressions most viewers claim to feel.

John Roebling was an unusually articulate and meticulous builder, schooled in his own disciplines and in the German Romanticism of Hegel, Goethe, Heine, and Kant. Drawings of the town of Eschwege, preserved from Roebling's high school days, are cited by David Steinman, his biographer, as notable for clarity of line in which topography is as important as architectural detail.¹¹ Both Steinman and Alan Trachtenberg (whose *Brooklyn Bridge: Fact and Symbol* is itself a monumental testimony) cite the builder's extensive notes and articles to establish a case for the designer's commitment to practical solutions, saturated with the aesthetic sensibilities of his own cultural moment. Each remarks that Roebling's working notes were both philosophical expressions of the oneness of nature, and aesthetic embodiments of the principle of harmonic order.

In the Romantic Aesthetic, to be an expression of reasoned organization of human experience, the unified whole must embody the emotional in the rational. Roebling thought and spoke in terms of organic unity; of manmade structures in which natural order is so necessarily and aptly expressed that they blend absolutely into the nature around them; of human constructions which are emblems of union between man and his

world. As a Romantic, comments Trachtenberg, Roebling was nourished by what Goethe called "correspondences and analogies" and, after a fundamental chemical principle, "elective affinities"—patterns in nature which the sensitive soul perceives and is drawn to ineluctably. The possibility of such perception proved to Roebling that "our mind is one with the Great Universal Mind."¹²

The most negative appraisal of Roebling's design came early on, from Montgomery Schuyler, a leading architectural writer. In the May 26 *Harper's Weekly*, issued two days after the bridge was opened, he wrote that, "It is a noble work of engineering; it is not a work of architecture." The towers, he complained, stood alone with no clue to their function. Trachtenberg built on Schuyler's estimate, observing that "Roebling was apparently unaware of any anachronism in his selection of medieval forms to express America's new role in history."¹³

By restating the issue and insisting on Roebling's connection of a new 'modernist' structure with the Romantic Ideal of harmony drawn from opposites, it can be contended that the towers have aesthetic as well as mechanical function and should be read differently. In this view, the cables and towers must function together aesthetically and mechanically, the function of rooting the bridge carried out by the juxtaposition of earthly (solidity and heaviness of the towers) and heavenly (airiness and delicacy of the cables). It is both a temporal and spatial rooting, though the temporal remains implicit in the visual referent of the tower design and the spatial is explicit in the suspension system. Of all the towers Roebling could have chosen, it is precisely the Gothic arch which interacts with the implied music of the spheres that emanates from the harplike cables. From his deliberate juxtapositions, we can appreciate Roebling's notion of unity of the whole, and do it more justice than Schuyler did in our effort to pinpoint which aspects of design and structure account for the bridge's aesthetic effect.

In this interpretation, the medieval motif is the antithesis of "anachronistic," deliberately exploiting any perception of anachronism to make a statement about the present. The medieval architectonic speaks of the chaos of nature contained and expressed in rationalized symbol systems, from which harmony and beauty radiate endlessly. The emotional overtone of cathedrals was rediscovered in the nineteenth century for its music, mystique, and structural design—the result of rational systems which express and simultaneously contain the irrational. The Romantics, drawn to the ruins of Europe and to the energy expressed through medieval creative/mystical visions, believed that the power to transcend temporality derives from a tension between system (rationality) and chaos (irrationality).

Roebling's work goes beyond what Whitman was able to see when he contrasted the new world with the old. Roebling infused into the mystical and the rational cultural heritage of the European past a promise of endless tomorrows, technologically expressed in lyrical form. Whitman was convinced that America's untrammled energy would lead the world into a

new day, leaving outworn forms behind. Roebling, on the contrary, saw more than ruins in castle keeps. He saw symbols. He was attracted to medieval silhouettes. He saw harmony in nature, and believed that souls awakened to beauty are necessary vehicles through which beauty was created. Beyond these he saw no contradiction between nature and construction, or rather he saw ways to create forms embracing both, suspending them in union. Hence he saw steel as a manmade material meant to be spun into spider webs.

The masonry Schuyler called crude can be seen as yet another expression of the natural controlled. Some surfaces are rough or carved, despite the impression of being untouched (an effect heightened by a light dusting of snow). But some of the stone is purposely smoothed, especially the articulations of the arches of the towers. The effect of this contrast is to reinforce the sense of order, symmetry, and mastery over the turbulent forces of nature. Whereas Whitman rejected elements of the past, Roebling enriched his projection into the future with aspects of that "elder World." The sense of feeling accustomed to the language of music, art, and literature, of feeling comfortable in metaphorical worlds, is at the center of Romanticism, European or American. "Emerson," reflected Mumford, "supplemented Hegel in the mind of John Roebling."¹⁴

Hegel, Roebling's philosophy professor,¹⁵ taught that a truly new world would be one in which man mastered nature and freed himself from the irrationalities of history: "The deepest law of politics is freedom—the open avenue to change. History is the growth of freedom, and the state is, or should be, freedom organized." To this Roebling added Emerson's American Romantic Ideal. "It is a want of my intellectual nature," he wrote, "to bring in harmony all that surrounds me. Every new harmony I discover is to me another messenger of peace, another pledge of my redemption."¹⁶ Roebling's grand "harmonies of creation" were his way of being part of the oneness permitted by the harmonious use of reason in the name of freedom. The engineer/architect/seer carried out, in America, Faust's dream of a unified world, and gave concrete shape and substance to Whitman's search for "rondure" (global completion).

No wonder that Henry Miller, for whom the undercurrent of death was so magnetic a force, could say that "The [Brooklyn] bridge was for me a means of reinstating myself in the universal stream."¹⁷ Even writers who identified the bridge with an ominous negative power deduced that this power emanated from the mystical oneness with the unseen forces of the city. Both John Dos Passos and Waldo Frank illustrated this negative persuasive strength, the power to destroy. In *Manhattan Transfer* (1925), Dos Passos showed the bridge as a place to escape and an avenue to suicide. In Frank's novel, *The Unwelcome Man* (1917), Quincy Burt came face to face with the depths of his alienation, on the bridge:

He felt that every cable of the weblike maze was vibrant with stress and strain...the bridge that reeled above him seemed an arbiter. It bound the city. It must know the city's soul since it was so close

to the city's breath. In its throbbing cables there must be a message.¹⁸

For some the bridge offered hope or redemption, for others it held an ominous "message." Quincy, not hearing sounds of hope or perhaps succumbing to the power of the bridge as "arbiter," commits suicide.

Against the background of Roebling's design and philosophy, Hart Crane's nine-year love affair with the bridge takes on special significance. In the most complete literary treatment of the bridge's image of power, Crane saw the structure as the consummate statement of Romantic Ideal. Living literally in its shadow in Washington Roebling's former house, he sought the secret of unity at the heart of this mysterious magnet. Perhaps Crane's case is one more example of "elective affinities." Crane, a true Romantic, sought an overriding symbol to convey his sense of the historical moment, to express the quintessential and so to transcend time. As he put it,

It is my hope to go through the combined materials of the poem, using our "real" world somewhat as a spring-board...Such a poem is at least a stab at truth...Its evocation will not be toward decoration or amusement, but rather toward a state of consciousness, an "innocence"(Blake) or absolute beauty...as though a poem gave the reader...a single, new word, never before spoken and impossible to actually enunciate, but self-evident as an active principle in the reader's consciousness henceforward.¹⁹

Crane's "new word, never actually spoken" compares with Roebling's ecstasy in solving a fundamental design problem in the shape of the cables. There is a striking similarity between Crane's search for the Absolute, "the word" in which the universe will stand revealed, and John Roebling's search for a "true theory" for long spans in bridges.

Roebling argued in 1864 that the object for an engineer in tune with natural harmonies is to find natural forms hidden from the eye, and incorporate them consciously in engineered structure. He defended long-span bridges because "the underlying principle of the form derives from one of the simplest unities in nature: the catenary curve, formed by a rope or cable hanging freely between two fixed points of support." Roebling assessed the use of this curve as "remarkable...the problem of the greatest strength, greatest economy, greatest safety, of perfect equilibrium and consequently also of perfect stability, are all solved by the same curve."²⁰ As Mumford commented,

The strong lines of the bridge, and the beautiful curve described by its suspended cables, were derived from an elegant formula in mathematical physics—the catenary curve—if...the masonry does not sing as Richardson alone perhaps could have made it sing, the steel work itself makes up for this, by the architectural beauty of its pattern; so that beyond any other aspect of New York, I think, the Brooklyn Bridge has been a source of joy and inspiration of the artist.²¹

In *The Theory of Nature*, an article part of which was published in *Scientific American* (1865), he conceived of engineering design as a search for "Universal Causality." Since man's "spiritual eye" allows him to see unity in the microcosm, and sympathetic vibrations in the right mathematician are the "key which unlock these mysterious movements" in nature, therefore the suspension bridge was a "spiritual or ideal conception." Trachtenberg summarized Roebing's conclusion: "Thus the sheer mass of the towers and anchorage jointed with the geometry of the cables to form a theoretical system rooted in the principles of nature."²²

Crane's first view of Brooklyn Bridge convinced him that he was within the aura of a miraculous composite symbol, capable of suggesting that Absolute he sought. He came to New York in 1923 and wrote "For the Marriage of Faustus and Helen." In this early work it is the "torn and empty houses," the refuse of industrialized cities, which filters down "as the wind settles/ on the sixteen thrifty bridges of the city."²³ But Crane's hunger for the single overriding symbol was far from satisfied. "I feel persuaded," he declared, "that here [in America] are destined to be discovered certain as yet to be defined spiritual qualities, perhaps a new hierarchy of faith not to be developed so completely elsewhere."²⁴

These qualities emerged in "The Bridge," his most ambitious poem. In "Helen and Faustus" the bridge appears as "capped arbiter of beauty in this street/ that narrows darkly into motor dawn..."²⁵, but by the time he wrote "The Bridge" Crane was sure of certain elements which made it, for him, an apt symbol of reaffirmation. For one, he saw in the structure what L. S. Dembo calls "power-in-repose":

And there, across the harbor silver-paced
As though the sun took step of thee, yet left
Some motion ever unspent in thy stride, —
Implicitly thy freedom staying thee!²⁶

This passage echoes the equilibrium implied by the freedom of Roebing's catenary curve, indeed by the freedom Hegel had promised would be the essence of the truly new world across the seas. It is the "right" eye, like the right mathematician, which, given the gift of imagination, can see the word lying hidden in the form of that curve.

Thus when the poet sees with the Visionary Eye...he sees a direct correspondence between the bridge, the sun, the stars; he sees, in short, a continuous and harmonious universe that gives an important place to modern man.²⁷

In the opening section of "The Bridge," Crane compares the freedom which stays the bridge with his sense of the "chained bay waters Liberty—" ²⁸. In this figure, the bay is chained in its confines, or Liberty on her rock, or both. Only Roebing's bridge can soar free and contained, the art of a true masterbuilder in the Romantic mode.

Because of this, the poet addresses the bridge as "harp and altar" with "choiring strings (as) threshold of the prophet's pledge." This is an echo

of Ellen Terry's amazement, of Lewis Mumford's assessment of the Bridge as fulfillment and prophecy. The unity Roebling dreamed and built is, for the poet, the "unfractioned idiom, immaculate sigh of stars." Out of such unity comes a vision of eternity: "condense eternity: And we have seen night lifted in thine arms." To the seeker of holy sights, the meaning of the bridge is promised as early as the introductory "Proem," where it glimmers darkly in the shadow, waiting to be revealed. The poet prays for clarity of vision:

O Sleepless as the river under thee,
Vaulting the sea, the prairies' dreaming sod,
Unto us lowliest sometime sweep, descend
And of the curveship lend a myth to God.²⁹

The traveller through time and American history is aided by the myth lent to God, the "curveship" of the bridge, the design with its transcendent form. Embarked on a voyage in search of redemption, the poet finally sees man's triumph in and over time, but sees it only when he has returned from the prairie to the shadow of the bridge. It is therefore a triumph not quickly or easily witnessed. First he must seek elsewhere and be disappointed when he cannot find a single, overriding symbol.

In this quest/myth poem, the city is not a realization of his dream. On the contrary, it is harsh, mechanical, destructive, and dehumanizing. The countryside is hardly better: "The last bear, shot drinking in the Dakotas/Loped under wires that span the mountain stream," is a barren memory of an obliterating time. The country, crisscrossed with those tracks from which Whitman expected so much, exhibits to the poet only the terrible consequences of mechanical power:

Under a world of whistles, wire and steam
Caboose-like thy go ruminating through
Ohio, Indiana—blind baggage-
To Cheyenne tagging...Maybe Kalamazoo.³⁰

At the mercy of iron, the human impulse is numbed.

Frontier after frontier, the poet leaves behind the wilderness and gold which yielded nothing but "gilded promises" and "barren tears." Betrayed by time and seduced by space, he discovers how temporary life is: "Seeing himself an atom in a shroud—/Man hears himself an engine in a cloud!" Crane accuses Whitman of seeing not reality but a self-made myth born of "syllables of faith." He, Hart Crane, wants to see a vision based on the real world, in which "the nasal whine of power whips a new universe" and where we are trapped by our own machines "in oilrinsed circles of blind ecstasy!"

Crane distinguishes Whitman's lyric love-ecstasy from the lyric love-elegy of his own voice: Walt, "our Meistersinger," had the courage and imagination to praise the bridge.

And it was thou who on the boldest heel
 Stood up and flung the span on even wing
 Of that great bridge, our Myth, whereof I sing!³¹

As the earlier poet sang of self, of all nature expressed within and through himself, the later one sings the song of the bridge, our collective myth. Disappointed that the world has not turned out as Whitman prophesied, Crane looks for a different meaning that he must find elsewhere than within. He can walk hand in hand with Whitman, but at last must strike out on another path to pry from this mechanized age its secret.

Crane seems bent on singing the failure of humankind to transcend its mortal destiny, even with its machines unable to attain the oneness its sought-for symbol is to guarantee.

Unwedded, stumbling gardenless to grieve
 Windswept guitars on lovely decks forever;
 Finally to answer all within one grave!

...homeless Eve,

And this long wake of phosphor,
 Furrow of all our travel—trailed derision!³²

iridescent

The meaning which should come from faith in Eve in her Garden is a “phantom.”

The poet sees his final descent into the tunnel as breaching the Gates of Wrath (Blake), as wallowing in the loss of faith and lack of meaning in subways, public bathrooms, the ‘mean streets’ of his search. The city fairly reeks of death: “the platform hurries along to a dead stop.”³³ Still searching, he prays to rise like Lazarus from the dead and seek the universal symbol for which he has undertaken his voyage of discovery though time and space, the Quest.

He finds it in “Atlantis,” the poem’s final section, which at last is the song of “our Myth,” the Bridge. It begins with a quotation from Plato: “Music is then the knowledge of that which relates to love in harmony and system.” The poet-seeker looks up at the Bridge and hears that very music.

Through the bound cable strands, the arching path
 Upward, veering with light, the flight of strings, —

Taunt miles of shuttling moonlight syncopate
The whispered rush, telepathy of wires....
Sybilline voices flicker, wavering stream
As though a god were issue of the strings...

The language is all music here, to “weave the song of love” held in the “one arc synoptic of all tides below.” The rising “arching strands of song...upward ring/ With silver terraces the humming spars.”

What song does this heavenly bridge sing? It sings “tomorrows into yesteryears.” The “deathless strings” of this harp express the harmony of the universal implicit in the “arc synoptic,” Roebling’s triumph over his fate. To Crane, it is the triumph of human imagination over mortality, a symbol of his long search for America’s “as yet undefined spiritual quantities.” As a gateway to a country floundering in its own darkness, the bidge is a “Swift peal of secular light, intrinsic Myth,/ Whose fell unshadow is death’s utter wound,”³⁴ and like a veritable medieval triumph, it conquers even death.

The “orphic strings” that Roebling was certain would leave an indelible mark “on this continent, on the age” have become the prophetic vision of a great artist. Montgomery Schuyler, despite his critique of the Gothic towers, called it “an organism of nature.” For Lewis Mumford, the bidge is

not merely one of the best pieces of engineering the nineteenth century can show anywhere, but perhaps the most completely satisfactory structure of any kind that had appeared in America.³⁵

This is how cultural history works. A confluence of insights and philosophical attitudes, the spectacular luck that a great and original masterbuilder was on the scene to hear the voices and respond, and the good fortune that the world permitted so great a work of art—are merely the beginning. There is also the advent of other imaginations, similarly formed or at least receptive to the ideas ‘in the air,’ who look at the same work and gasp recognition. We who inherit the paintings and photographs, read the poems, and walk the bidge are beneficiaries of the great missions of those who felt in tune with their time to one extent or another.

A composite symbol, the Brooklyn Bridge is a sort of dictionary of its time. The conception of one man, construction of many, its design embodies Roebling’s genius and a whole world’s sensibilities. It is a dream of transcendent harmonies, of universal wholeness, of a Romantic Ideal that took shape, somehow. Once built, it expressed a hope that technology could triumph over limitations, and so it promised to all who would follow that there is a “Bridge to the Future,” and that it is manmade.³⁶

NOTES

1. Lewis Mumford, *The Brown Decades* (New York: Dover Publications, 1931), 104. Two excellent sources for Brooklyn Bridge are David McCullough, *The Great Bridge* (New York: Simon and Schuster, 1972), and Alan Trachtenberg, *Brooklyn Bridge: Fact and Symbol*

(Chicago: Univ. of Chicago Press, 1965). For John Roebling and his family, see Hamilton Schuyler, *The Roeblings; A Century of Engineers, Bridgebuilders and Industrialists* (Princeton, 1931); David Barnam Steinman, *The Builders of the Bridge* (New York: Harcourt, Brace & Co., 1945); and Marilyn E. Weigold, *Silent Builder: Emily Warren Roebling and the Brooklyn Bridge* (Port Washington: Associated Faculty Press, 1984).

2. For the industrial growth of Brooklyn, see Harold Coffin Syrett, *The City of Brooklyn, 1865-1898* (New York: Columbia University Press, 1944), 13-16, 233-244.

3. For these proposals, see Barbara Head Milstein, "Crossing the River: The Alternatives," in *The Great East River Bridge, 1883-1893* (Brooklyn: Brooklyn Museum, 1983), 140-47.

4. Trachtenberg, *Brooklyn Bridge*, 39.

5. McCullough, *Great Bridge*, 27. The New York Bridge Company was chartered by the legislature for the purpose of building the Brooklyn Bridge.

6. Walt Whitman, "Passage to India," [1868] *Complete Poetry and Prose: Leaves of Grass (1855), Leaves of Grass (1891-92), Complete Prose Works (1892) and Supplementary Prose, Justin Kaplan, ed.*, (New York: Literary Classics of the United States, Inc., 1982), 532.

7. Trachtenberg, *Brooklyn Bridge*, 125.

8. Susan Edmiston and Linda D. Cirino, *Literary New York: A History and Guide Book* (Boston: Houghton Mifflin Company, 1976), 346.

9. Whitman, *Leaves of Grass*, 343, 344, 348, 349.

10. Roger Manvell, *Ellen Terry* (New York: G.P. Putnam & Sons, 1968), 180.

11. Steinman, *Builders of the Bridge*, 9. Steinman was a prominent bridge builder, whose biography of Roebling was long considered authoritative, but "was based on superficial research and contains many inaccuracies" (McCullough, *Great Bridge*, 608-09).

12. Trachtenberg, *Brooklyn Bridge*, 60.

13. Montgomery Schuyler, "The Bridge as a Monument," *Harper's Weekly* 26 May 1883, 326 (for a succinct appraisal of Schuyler's critique see Mumford, *Brown Decades*, 103-04); Trachtenberg, *ibid.*, 79.

14. Mumford, *ibid.*, 32.

15. Cited in Steinman, *Builders*, 13. John Roebling was "Hegel's favorite pupil," according to a biographical memoir by his parents (Christoph Polycarpus Roebling and Friederike Dorothea Roebling, in C.B. Stuart, *Lives and Works of Civil and Military Engineers in America* (New York, 1871), 12 (cited in McCullough, *Great Bridge*, 42).

16. Trachtenberg, *Brooklyn Bridge*, 59.

17. Henry Miller, *The Cosmological Eye* (New York: New Directions, 1939), 347.

18. In Trachtenberg, *Brooklyn Bridge*, 141.

19. From Crane's essay, "General Aims and Theories," cited in L. S. Dembo, Hart Crane's *Sanskrit Charge: A Study of "The Bridge"* (Ithaca: Cornell Univ. Press, 1960), 8.

20. Trachtenberg, *Brooklyn Bridge*, 69.

21. Lewis Mumford, *Sticks and Stones* (New York: Horace Liveright, 1924), 115-16.
22. John Roebling, "Life and Creation," cited in Trachtenberg, *Brooklyn Bridge*, 69.
23. *Ibid.*, 71.
24. Hart Crane, *The Poems of Hart Crane*, Marc Simon, ed. (New York: Liveright, 1986) 31.
25. Dembo, *Sanskrit Charge*, 9.
26. Crane, *Poems*, 31.
27. Dembo, *Sanskrit Charge*, 9; Crane, "The Bridge," *ibid.*, 43.
28. Dembo, *ibid.*, 49.
29. Crane, "The Bridge," 43.
30. *Ibid.*, 44.
31. *Ibid.*, 57, 58.
32. *Ibid.*, 83.
33. *Ibid.*, 87.
34. *Ibid.*, 99.
35. *Ibid.*, 105.
36. Mumford, *Brown Decades*, 97.
37. "Bridge to the Future: A Symposium Commemorating the Centennial of the Brooklyn Bridge," sponsored by Brooklyn Rediscovery and the New York Academy of Sciences, 1983.

Bridges and the Urban Landscape

By Jeffrey A. Kroessler

Historically, transportation links with New York City have determined whether communities within the nation's largest metropolitan region would prosper and grow, or languish as economic and cultural backwaters. All of the most important roads on Long Island led to ferry or steamboat landings in Kings and Queens Counties, and, of course, the routes of the Long Island Railroad show that its purpose is to carry passengers and freight in and out of the great city, and only secondarily between points on the Island.

The opening of the Brooklyn Bridge in 1883 was the first physical link between Long Island and New York City, with an eventual political union of the cities of New York and Brooklyn all but inevitable. In the next decade, private corporations financed passenger railroad traffic from New York to New England. And from the 1930s to the 1960s, the quasi-governmental Triboro Bridge and Tunnel Authority (TBTA) built four suspension bridges for private automobile and truck traffic: the Triboro, Bronx-Whitestone, Throgs Neck, and Verrazano Bridges. Each served the planning needs of its time, but while earlier bridges fostered urbanization of suburban and rural districts on Long Island, the bridges of the TBTA were built primarily to speed traffic through the region, by-passing the congested urban core as often as feeding into it.

When Mayor George McLellan stepped into the Department of Bridges' automobile on March 30, 1909, and rode across the just-completed Queensboro Bridge, the great cantilever span enjoyed its "unofficial" grand opening and the Borough of Queens entered the twentieth century. This came after eight long years of labor and periodic delays, more than four decades after the formation of the New York and Long Island Bridge Company on April 16, 1867 (the same day that the New York Bridge Company received its charter to build the Brooklyn Bridge), and seventy years after the first proposal for a Blackwell's Island Bridge.

The opening of the span fulfilled the promise of Greater New York made in 1898, when Queens, together with Kings, Richmond, and a section of Westchester County became parts of the nation's greatest metropolis. In truth, their fortunes had long been linked with the rise of New York, but consolidation brought all interests under one municipal government.¹

On that crisp March afternoon the streets on the Manhattan side were

crammed with spectators, and many more squeezed into the open windows of tenements along Second Avenue and East 59th and 60th Streets. After the cars carrying the mayor and other dignitaries completed their symbolic crossing, the roadway was opened to traffic.² At once, the practical and commercial nature of the new bridge was apparent. Wagons laden with produce from truck farms in still overwhelmingly rural Queens headed into Manhattan, while vehicles piled high with merchandise intended for stores on Long Island crossed in the opposite direction. Within the hour, the roadway was jammed with private carriages, horse-drawn delivery wagons, a few gasoline powered trucks and cars, and tally-hoes (stage-coaches hired by the urban gentry for day trips into the countryside). Hundreds of young men representing athletic clubs from around the city raced over the upper-level walkway for the honor of being first to reach the Queens side.

The official grand opening on June 12 was marked with a parade and speeches by Governor Charles Evans Hughes, Secretary of War Jacob M. Dickenson, and John D. Crimmins of the "Committee of Forty" Queens citizens who had pushed for the bridge. Capping the evening's festivities, a fireworks display outlined the superstructure in flaming torches; a rainbow of light cascaded over the side of the bridge, an effect known as "Niagara Falls." On the day before the parade, the plaza on the Queens side was alive with "frank-furter men...pie and milk men, the cane and knife ringers, and all those who cater to the funloving throng," as well as animal shows, merry-go-rounds, and a Ferris wheel powered by two sweating men. With barely concealed condescension, the *New York Times* described the celebration as "Queens Borough's own day, and all Queens was there in best bib and tucker. Manhattan took it calmly, for all the bridges are Manhattan's and its citizens are used to them."³ At the end of the week-long celebration came the crowning of the "Queen of the Queensboro Bridge," an honor bestowed upon a young woman from Long Island City.⁴

Overshadowed by the magnificent Brooklyn Bridge, the Queensboro nonetheless is beautiful. It has inspired Edward Hopper, Woody Allen, and F. Scott Fitzgerald, who, in *The Great Gatsby*, described driving

Over the great bridge, with the sunlight through the girders making a constant flicker upon the moving cars, with the city rising up across the river in white heaps and sugar lumps all built with a wish out of non-olfactory money. The city seen from the Queensboro Bridge is the city seen for the first time, in its first wild promise of all the mystery and the beauty in the world.⁵

The Queensboro never would rival its older sibling, but neither was it an architectural anti-climax like the poorly-designed Manhattan Bridge, which opened to little fanfare on New Year's Eve, 1909. As his last official

act before leaving office, Mayor McLellan and his motorcade drove over its not quite finished roadway.⁶

Perhaps the Borough of Manhattan was too sophisticated to indulge in the loud and flashy celebrations staged by Brooklyn and Queens for their bridges. The purpose of the Manhattan Bridge (or Bridge No. 3, as the Board of Estimate referred to it) was to relieve pressure on the Brooklyn Bridge by carrying new rapid transit and street car lines between lower Manhattan and downtown Brooklyn. The Queensboro Bridge, conversely, pre-dated the urbanization of Queens and thus was a primary agent in that process.

In spirit, purpose, and impact, the Queensboro most resembles the Williamsburg Bridge (1903), the second bridge across the East River and, for a time, the longest suspension bridge in the world (four and a half feet longer than the Brooklyn Bridge).⁷ Both of these steel spans were designed to carry elevated lines, trolleys, and private vehicles (then mostly horse-drawn), and also featured pedestrian promenades on their upper levels.⁸ Within a few years of the Queensboro's opening, large tracts of central Queens, particularly Ridgewood and Middle Village, and eastern Brooklyn, especially New Lots and East New York, were transformed from nineteenth-century backwaters into twentieth-century urban districts.⁹ Feeding this growth was the completion of rapid transit links to downtown Brooklyn, first the Brooklyn Rapid Transit Company's Myrtle Avenue elevated (1906) and then the direct service over the Williamsburg to Metropolitan Avenue (1914).¹⁰

The best way to visualize the rate of change in these sections is to examine real estate atlases from the period. The 1891 Wolverton *Atlas of Queens County* predates the bridge, while the E. Belcher Hyde versions of 1903, 1908, and 1929 offer graphic evidence of a rural and suburban landscape quickly assuming an urban shape. Known then as East Williamsburg, the section of Ridgewood along the trolley routes and in the vicinity of the new elevated experienced a remarkable transformation in only five years.

Hyde's 1903 edition shows a neighborhood of mostly wood-frame houses, picnic parks, dance halls, and baseball fields, a couple of breweries which provided local employment, and several five- to twenty-acre farms. By comparison, the 1908 issue (corrected to ca. 1910) shows that the agricultural plots had been subdivided and a grid plan imposed. Lining the new streets were blocks of two- and three-story row houses, a few in wood but all of the larger ones in brick. By the 1929 edition all available land was developed, often taking the form of larger brick tenements, clearly showing the impact of rapid transit. The G. X. Matthews Construction Company built dozens of yellow and orange brick three-story railroad flats, an attractive improvement on housing in older working class districts but resembling urban tenements more than looking like suburban homes.¹¹

Manhattan was not the exclusive agent of change. Although annexed by the City of New York in 1898, the wealthy and powerful City of Brooklyn played a prominent role in the growth of Kings and Queens.

Williamsburgh, incorporated as a city in 1852 and annexed by the City of Brooklyn three years later, was the industrial heart of that city. While maps depict an urban landscape on the Brooklyn side of the border, the Queens side is mainly open, given over either to recreational sites like picnic parks or to nuisance industries like bone burning and rendering. Even before the bridge, all streetcar lines fed into the ferries on the Williamsburgh waterfront or ran directly into downtown Brooklyn. Furthermore, in the 1880s all streetcar companies paid annual license fees (\$20 a car) to Brooklyn for running cars into Queens.¹²

The Williamsburg Bridge linked two thickly developed sections of Greater New York, while simultaneously fostering urbanization beyond the old city boundaries. With the Queensboro Bridge, however, the connection with the urban core, Manhattan, was responsible for the dynamic transformation of a rural county of truck farms and suburban retreats into an urban borough, gleaming with new transit lines and housing developments. In 1900 the population of Queens was 152,999; by 1930 it had grown to 1,079,129, an increase of more than 700 percent.¹³

The new Queensboro Bridge was impressive. Designed by master bridge builder Gustav Lindenthal and architect Henry Hornbostel, it was the fourth-longest span in the world (3723.5 feet), after the Firth of Forth railroad bridge in Scotland and the other two East River bridges. Work on the Queensboro began in earnest in January 1901, and was completed just over eight years later at a cost of nearly \$20 million and fifty lives. Though beauty is in the eye of the beholder, Lindenthal had no doubts. "In a bridge," he remarked to the Municipal Art Society, "it is not possible to separate the architectural from the engineering features." Hornbostel was not so sure: upon seeing the completed span, he exclaimed, "It's a blacksmith's shop."¹⁴

The bridge had two levels, with pedestrian promenades and room for elevated lines above and four trolley tracks and a thirty-six foot roadway below. Within a few years, the tracks on the inner roadway were removed to relieve traffic congestion.¹⁵ There was no trolley service for six months, because the Board of Estimate could not, or would not, decide which applicant would receive the fifty-year monopoly. Eventually, it went to the New York & Queens County Railway, the company favored by leading citizens' organizations (the Board need not have agonized over the question, for within fifty years there no longer were trolleys running over the bridge—or anywhere else in the city).

The purpose of the design was to link Queens with the network of transportation and urban life. Pedestrian walkways were included as much to continue the sidewalk over the river as to provide an exhilarating experience for urban dwellers. The extension of the Second Avenue Elevated over the bridge to Queensboro Plaza, where it joined the new BMT and IRT lines to Corona and Astoria, brought the city to Queens.

Although the Queensboro Bridge opened in the first decade of the twentieth century, its design is thoroughly nineteenth century, resembling the plan recommended in 1877 by consulting engineers. Trucks and

automobiles scarcely entered into the original plans, which in large part accounts for the problems facing engineers now reconstructing the bridge.¹⁶ As conceived in the 1870s by the New York and Long Island Bridge Company, the span was to carry the tracks of the Long Island Railroad from Queens directly into the city. The project languished for want of capital, its only tangible result a competition for an appropriate design.¹⁷ Directed by Dr. Thomas Rainey, president of the company, work began briefly in 1881, only to be terminated a few months later. There the matter rested another decade.

Also in 1881, Austin Corbin, the entrepreneur who developed Manhattan Beach, took control of the troubled Long Island Railroad and put it on a sound and profitable basis. He then turned to his scheme to create a deep-water port at Fort Pond Bay, at Montauk Point, with LIRR rail service to Manhattan for transatlantic passengers. After rejecting the idea of digging a tunnel under the East River, he fixed on the corporate remains of the New York and Long Island Bridge Company, as a Blackwell's Island Bridge could bring passengers directly into his proposed new uptown terminal. He bought the company in the early 1890s, and work on the bridge was resumed in 1895 and again in 1896, when Corbin's death in a carriage accident brought to an unsuccessful conclusion all efforts to build an East River bridge by means of private capital.¹⁸

After the creation of Greater New York, the new city government voted to build "Bridge 4," called the Blackwell's Island Bridge until designated the "Queensboro Bridge" in 1908. As actually built, the bridge was similar to the cantilever design recommended in 1877, although the city discarded the plan for tracks for commuter and freight lines. The bridge was the concept of business tycoons and railroad barons of the Gilded Age, but it was built by the city itself in the Progressive Era. The unfortunate Dr. Rainey, who had invested twenty-five years of his life and lost his entire fortune of \$600,000 in the venture, took his first stroll over the Queensboro Bridge, as reported in the *New York Times*:

"This is my bridge," said the doctor as he wiped away the tears that trickled down his withered cheeks. "At least it is the child of my thoughts, of my long years of arduous toil and sacrifice. Just over there," pointing to a ruined heap of stone along the river front, "are the old stone towers of my bridge.... I spent all I owned on the project, and then New York, with all its great wealth and power, came in and took away my possessions, and now in my old age I am left in ill health and alone to eke out my remaining days. It is a great bridge, much grander than the one I had in mind."¹⁹

When the Pennsylvania Railroad bought the Long Island Rail Road in 1900, it also purchased stock in the New York Connecting Railroad (incorporated in 1892), which became an equal partnership of the PRR and the New York, New Haven & Hartford line. The PRR also planned an ambitious new Pennsylvania Station, the grand monument designed by the firm of McKim, Mead, and White. For the first time, the trains of

the Pennsylvania and the Long Island came directly into the heart of the city through tunnels under the Hudson and East Rivers, respectively. Corbin's dream was finally realized. The first trains rolled into Penn Station in 1910, launching a period of rapid growth of Long Island's railroad suburbs.²⁰ Forest Hills and Kew Gardens, for example, were two of the more impressive communities built along the new main line between Penn Station and Jamaica.

The linchpin of the ambitious plan was a new steel arch across the East River at Hell Gate, the treacherous waters off Astoria. When completed in 1917, it was the largest arch bridge in the world, requiring 80,000 tons of steel. Designed by Gustav Lindenthal, the Hell Gate arch would be strong enough "to carry on each of its four tracks a load equivalent to two locomotives," each weighing 190 tons,

followed by a train load of 5,000 pounds to the lineal foot. This would be equivalent to loading the whole of the four tracks from end to end of the arch with trains made up of heavy freight locomotives; and so stiff is the arch that under this load, the deflection at the center would be only three inches.²¹

As a feat of architecture and engineering, the Hell Gate Bridge has few rivals; its completion gave the PRR a direct route through New York to New England. Passenger trains from Connecticut and Westchester passed over the bridge, through the Sunnyside Yards, and under the East River to Penn Station, where travelers could change to the PRR en route to Philadelphia and Washington. The impact on freight service was equally dramatic, for now businesses on Long Island could benefit from quicker and more efficient transportation connections. The growth of Queens, and especially of Long Island City, as an industrial center after 1910 was in no small measure due to the new rail lines.

Missing from this network was direct freight service between Long Island and New Jersey; freight cars still had to be floated on barges and ferried across the harbor, though this trip was much shorter than the earlier necessity of floating them down the Harlem and East Rivers (the LIRR car floats still stand on the Hunters Point shoreline, but may be destroyed when construction of a new Port Authority project begins).

Business interests in Queens and Brooklyn had long proposed a Narrows Tunnel for railroad traffic, part of a vision which saw Queens rising to regional supremacy as an industrial and commercial center. The grand proposal included development of Jamaica Bay as a deep water port—larger than Liverpool, Hamburg, and Rotterdam combined—and connected to the State Barge Canal by a canal across Queens between Flushing and Jamaica Bays. Another canal would link Flushing Bay with Newtown Creek. Thus the railroad tunnel would be but one component of a larger development scheme deemed necessary "to prevent the City's isolation from the rest of the Nation, and maintain its commercial supremacy."²²

There was a key difference between the proposed Narrows Tunnel and the realized Hell Gate Bridge. The New York Connecting Railroad was to link New York with other regions, with traffic flowing into and through

Manhattan at Penn Station; the Jamaica Bay development and Narrows Tunnel saw Queens competing with other parts of the same region, specifically Jersey City and Newark. In another sense, however, the plan to develop Jamaica Bay looked toward a future in which industry would abandon the urban core for the periphery, with the city ringed by interconnected transportation lines. Although proponents conceded Manhattan's role as the hub of the region, the circumferential railroad system would have encouraged industrial and commercial development in the suburbs that eventually would rival the dominance of the inner city.

When a circumferential system was finally built, it was in concrete, not steel rails. Originally part of the 1928 Regional Plan of New York and its Environs, laid out in 1930 by the Metropolitan Conference of Parks, chaired by Robert Moses, the circumferential parkway was built during the 1930s as one of many New Deal projects that transformed the region's landscape.²³ The flow of federal funds into the City permitted the realization of many projects suggested in the '20s but abandoned when the depression hit, among them the Triborough Bridge, the Bronx-Whitestone Bridge, and the Queens-Midtown Tunnel.

The Triborough Bridge, connecting Queens with Manhattan and the Bronx, was suggested as early as 1916 when Edward A. Byrne, Chief Engineer of the Department of Bridges, drew up plans and recommended construction. The city allocated funds for soundings and preliminary sketches during the 1920s, and in 1929 the Board of Estimate committed the city to construction, appropriating \$3 million and voting to issue bonds to finance construction. Mayor Jimmy Walker presided at the ground breaking ceremonies. Property along the approach in Astoria was condemned and construction of anchorages began, but the deepening crisis of the depression caused all work to stop within two years.²⁴

The Triborough was the first bridge conceived, designed, and built for the demands of a twentieth-century city. The earlier East River crossings—the Brooklyn, Williamsburg, Queensboro, and Manhattan Bridges—were intended to tie sections of the city into a more efficient and cohesive metropolis, as extensions of the streets and the urban transportation network. Each of those four crossings went up above ferry lines, soon rendered obsolete. As originally proposed, the Triborough would not have been much different. It too was to cross above a ferry route, the 92nd Street-Astoria line, which also shut down as a result of duplication of services.²⁵

In the booklet published for the opening ceremonies, July 11, 1936, Robert Moses described the original conception as “nothing more than a river crossing, starting as near to the water front as possible in one borough and going down to grade just as fast as engineering principles and safety of life and limb would permit in the others.” Moses, however, recognized

that generous approaches and connections to main arteries are even more important than the crossings themselves, and that there is no justification for building these structures without providing adequate

means to get to and from them. The building of approaches as an afterthought is always expensive and frequently impossible, but it has been up to now the rule and not the exception.²⁶

The subtitle of that booklet, "A Modern Metropolitan Traffic Artery," revealed this alternative vision. Rather than a single span linking three boroughs, the Triborough as seen by Moses was to unite the entire region, from the Long Island Parkway system to the Westchester parkways and from New England to the George Washington Bridge. The approach roads included the Grand Central Parkway out to the Kew Gardens Interchange (originally known as "the pretzel"), a new highway along the Manhattan side of the river from 125th Street to 96th Street, and redesigned boulevards in the Bronx connecting with the Hutchinson River Parkway. The beneficiary of this ambitious vision was, of course, the private motorist.

The Triborough was the first Long Island bridge designed exclusively for cars and trucks. Although it featured pedestrian walkways, their purpose was to take residents of Astoria, Harlem, and the Bronx to the new parks Moses planned for Randall's Island. To Moses, no project was complete without the parks and playgrounds he built into all his bridges and parkways during this period. Today these recreational areas, the paths and sitting areas along the parkways, are mostly abandoned. For the first time it was less important to speed traffic in and out of the city than it was to ease the flow through the metropolitan region. The Queensboro Bridge linked 60th Street in Manhattan with no great artery on the Queens side—the closest thing to it being Northern Boulevard, a mid-nineteenth-century turnpike and streetcar route. Indeed, this was the road taken by Gatsby between West Egg and the City: "...we sped along toward Astoria at fifty miles an hour, until, among the spidery girders of the elevated, we came in sight of the easy going blue coupe."²⁷ Queens Boulevard was not yet fully plotted, let alone paved.

In sum, the purpose of the first generation of river crossings was outward expansion of the city. Even the Queens-Midtown Tunnel, proposed in the early 1920s, was intended to relieve congestion on the already overcrowded Queensboro Bridge.²⁸ By contrast, the Triborough (1936), and then the Bronx-Whitestone (1939), Throgs Neck (1961), and Verrazano Narrows (1964), all had enormous impact on the growth of the post-war automobile suburbs. The Sound Crossing proposed by Robert Moses in 1964, and finally rejected in 1973 by Governor Nelson Rockefeller, would also profoundly have influenced the Island's pattern of growth and change.

The Bronx-Whitestone Bridge was intended from the start as a component of the great circumferential highway, and had been proposed by the Regional Plan a decade earlier. After its completion in the record time of twenty-three months, the only major piece missing from that grand scheme was the Brooklyn-Battery Tunnel, or, as Moses envisioned it, a monstrous Brooklyn-Battery Bridge.²⁸ Like Lindenthal before him, Moses saw aesthetics as an essential component of bridge design. He believed that the Whitestone would "set a standard of convenience and beauty for private and other public enterprises." Moses exaggerated only a little when

he described it as

architecturally the finest of them all. I know of nothing comparable to it in cleanliness and simplicity of design, in lightness, and in the absence of pretentiousness and ornamentation. If there is such a thing, as pure functional architecture, then we have it here.²⁹

Unfortunately, it soon was clear that this beautiful structure was inherently unstable in high winds. A stabilizing truss was added, altering the clean lines and also eliminating pedestrian walkways.

The history of the Verrazano-Narrows Bridge extends as far back as the turn-of-the-century, when planners and business leaders saw the necessity of either a rail or highway link between Brooklyn and Staten Island. The idea behind the Throgs Neck Bridge, however, is altogether different. Unlike the Bronx-Whitestone, which was planned as part of the circumferential system, the Throgs Neck's one and only purpose was to relieve traffic congestion on the older spans. It was designed exclusively for cars and trucks; when it opened in 1961, the automobile age was in full flower. This suspension bridge has no walkways, a feature likewise omitted from the Verrazano.

According to the Triborough Bridge and Tunnel Authority, the Throgs Neck would be "an important link in the metropolitan arterial system. It is an integral part of the National and Defense Highways." Perhaps more importantly, it would open "an additional gateway between Long Island and its neighbors in the Bronx and Westchester leading to New Jersey and the West and to upper New York State and New England." Moses never thought small, always linking projects to larger goals. The Throgs Neck was one more part of an impressive network of post-war highway projects: double-decking the George Washington Bridge; the Narrows Bridge; and the Mid-Manhattan and Lower-Manhattan Expressways. In a comment reminiscent of his arguments for the Whitestone Bridge twenty years before, he noted that this bridge and its approaches would "contribute materially to smooth vehicular transportation to the World's Fair of 1964-1965."³¹

Conditions had changed since 1939. The Whitestone Bridge had brought parkways through sparsely populated parts of Queens, but the arterial program for the Throgs Neck was "one of the most ambitious ever undertaken in a densely populated area." It included widening Grand Central Parkway, transforming the four-lane Whitestone Parkway into an eight-lane Expressway, extending the Van Wyck from Kew Gardens to Flushing, and constructing the new Clearview Expressway. This was the first time that community opposition seriously delayed, and finally changed, a Moses project. More than four hundred homes lay in the path of the possibly misnamed Clearview Expressway; two hundred of these were moved out of the way, but the others were bulldozed.³² In a partial victory, the community stopped the Clearview at Hillside Avenue, thwarting plans to extend it through several more neighborhoods on its way to the planned but as yet unbuilt Nassau Expressway near Idlewild (now Kennedy) Airport.

The Throgs Neck Bridge relieved congestion on the Whitestone, but within a few years it was apparent that rather than merely siphoning traffic, it was generating millions of additional crossings. Thirty million vehicles had used one bridge in 1960; thirty million used each by the end of the decade. Even the TBTA had estimated that by the 1980s the two bridges would carry about 72 million vehicles a year.³³ Planners' and analysts' warnings of increasing automobile traffic and a not coincidental decline in rail transit came true sooner than anyone expected.

In his classic study of urban sprawl, Jean Gottmann wrote that:

More has been done to keep automobile traffic flowing in and around Manhattan than in any other spot on our globe. For the last forty years this has been traditional thinking and acting. It has given Megalopolis an unrivaled intensity of automobile traffic flow, but it has also given the region its celebrated traffic jams and delays.

Gottmann continued prophetically:

More facilities to move people can, of course, be added, for engineering or technological solutions can be found to all flow problems; but such solutions might be at the cost of so many dollars to the community and of so much aggravation to the public transported that the wisdom of a purely technical and statistical approach can be doubted.³⁴

The suburban growth of Nassau, Suffolk, Westchester, and southern Connecticut, and the ever increasing number of cars on the highways, compelled consideration of the only solution the recent past suggested: building another bridge somewhere to the east of the Throgs Neck. This seemed reasonable, since based on economics, demographics, and geography, all traffic from Long Island had to pass through the bottleneck of New York City. At a conference on "Energy, Environment and Planning" for the Long Island region in 1971, Boris Pushkarev, chairman of the Regional Plan Association, predicted that, "In economic terms, Long Island will tend to become somewhat more self-sufficient as urbanization moves farther and farther away from its initial source, Manhattan." Most of the new employment, he added, would be in the office sector. As for population growth, Pushkarev discounted any great changes: "The Island is a maturing settlement area, past the crest of its most intense growth in sheer numbers of people."³⁵

The proposed Sound Crossing, therefore, must be seen in the context of the apparently contradictory forces of increasing automobile use and slowing growth. A bridge closer to the city would relieve some of the crowding and might "tend to enlarge job choices for both Long Islanders and the residents of surrounding areas." A bridge further east, between Bridgeport and Port Jefferson, would have a more limited impact since, as Pushkarev noted, "the distance over water is much longer than the average trip to work."³⁶

Presenting its case for the new bridge, the New York State Department of Transportation acknowledged that it "would not create boom conditions," but also advanced arguments that had always gained acceptance:

A bridge would decrease travel time and costs, make possible wider fields of employment, increase accessibility to recreational areas, and open up many more social, cultural, and educational opportunities. In a nod toward environmental concerns, the report suggested that the bridge would have almost no impact on sensitive wetland areas, and could actually reduce air pollution by reducing vehicle miles and speeding the traffic flow.³⁷

Another argument for the Sound Crossing was that, as an essential link in the interstate circumferential system, it would “eliminate the necessity for traffic to pass through areas of high congestion.” In recommending the Rye-Oyster Bay Bridge, the DOT claimed it “would have the great advantage of immediately closing a gap between existing expressways, thus completing a metropolitan circumferential expressway from Suffern to Seaford.”³⁸ (Did anyone ever establish how many drivers wanted to go from Suffern to Seaford?) Opponents saw the earlier completion of the Cross Westchester and Seaford-Oyster Bay Expressways as evidence that the crossing was planned long before the fact was made public. Moses admitted conceiving of a Sound Crossing about 1930, when he “made the first study of ferry service over there, found that it didn’t solve anything.”³⁹ But the reasons he offered for its necessity sounded tired, more appropriate to the city of the 1930s, the decade of his greatest triumphs, than the suburban reality of the 1970s.

However eloquent the economic, social, aesthetic, and, above all, environmental arguments against the proposed span, and however impressive the chorus of voices in opposition, the bridge seemed destined for completion as long as Rockefeller and Moses were united in its support. But Moses’s power had been on the wane since the debacle of the 1964-65 World’s Fair. The 1967 legislation, authorizing the State to construct not one but two Sound crossings, further circumscribed his power by putting the TBTa under the new Metropolitan Transportation Authority. And Governor Rockefeller was, after all, a politician; he saw that a bridge forced on Nassau and Westchester—both Republican strongholds—over strenuous, influential, and united opposition was not the wisest course of action. Never mentioned in the Governor’s announcement of June 20, 1973, which killed the crossing, was the daunting prospect of financing the project.

From the enthusiastic construction of the Brooklyn Bridge, completed in 1883, to the rejection of the Rye-Oyster Bay Bridge in 1973, efforts to expand and unite the metropolitan region have been realized in the building of bridges over waters dividing it into competing interests. The presence of the first and still most beautiful East River bridge brought unification of New York and Brooklyn inevitably closer. The Williamsburg, Queensboro, and Manhattan Bridges all carried urbanization into suburban and rural sections of Greater New York. The Triborough, Bronx-Whitestone, Throgs Neck, and Verrazano-Narrows were planned, designed, and built for the twentieth-century city, speeding automobiles and trucks through the region over interstate highways.

“As an engineering job, this is small stuff,” said Robert Moses of the Sound Crossing, but that was not the point. It was no longer enough to follow through on a project just because it was possible. The growth generated by the earlier East River spans had been welcomed as the reward of progress, but instead of bringing urbanization to an empty and under-utilized landscape, this last bridge proposed for the Sound would have affected mature suburban communities, accelerated development of open space in Suffolk, and brought unwanted congestion and pollution. The residents of Nassau and Suffolk understood that very clearly, and knew that nothing less than the quality of life in their communities was at stake.

NOTES

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2. See photographs, Museum of the City of New York collection.
3. *New York Times*, 12 and 13 June 12 1909.
4. For the “Queen of the Queensboro Bridge,” see *Transportation* (Long Island City: Community History Program, LaGuardia Community College, 1981), 21-24.
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the City of Brooklyn, New York: 1880; *Guide Map of the Borough of Brooklyn, Brooklyn Daily Eagle Almanac*, 1900; see also *Eagle Almanac* maps from 1907, 1911, and 1913.

13. Ira Rosenwaike, *A Population History of the City of New York* (Syracuse: Syracuse University Press, 1972), 133.

14. Reier, *Bridges*, 41, 47.

15. Photographs, Museum of the City of New York collection.

16. For efforts to transform this bridge built for wagons, trolleys, pedestrians, and elevated lines into a modern traffic artery, see the design boards submitted by the Department of Transportation to the New York City Landmarks Preservation Commission, 1988.

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18. J. S. Kelsey, *History of Long Island City, New York. A Record of Its Early Settlement and Corporate Progress* (Long Island City: Long Island Star Publishing Company, 1896), 79-82.

19. *New York Times*, 13 May 1909.

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24. Franklin J. Sherman, *Building Up Greater Queens Borough: an Estimate of its Development and the Outlook* (New York: The Brooklyn Biographical Society, 1929), 26; George Tabor, "The Saga of the Triborough Bridge," *Bronx County Historical Journal* IX (July 1972):53-55; *The Triborough Bridge: A Modern Metropolitan Traffic Artery* (New York: The Triborough Bridge Authority, 1936), 9.

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28. Sherman, *Building*, 16, 25-29.
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38. New York State DOT, 13, 69-70.
39. Robert Brigham, "The Case Against the Bridge," *On The Sound* 1 (March 1971):14-15; Barrett Seaman, "The Battle of the Bridge," *On The Sound* 3 (August 1973): 59-60; "A Conversation with Robert Moses About HIS Bridge," *On the Sound* 2 (April 1972):29-30.

Is Long Island an Island?

By R. Lawrence Swanson

The author was an expert witness for the United States in this matter when it was heard before the Special Master.

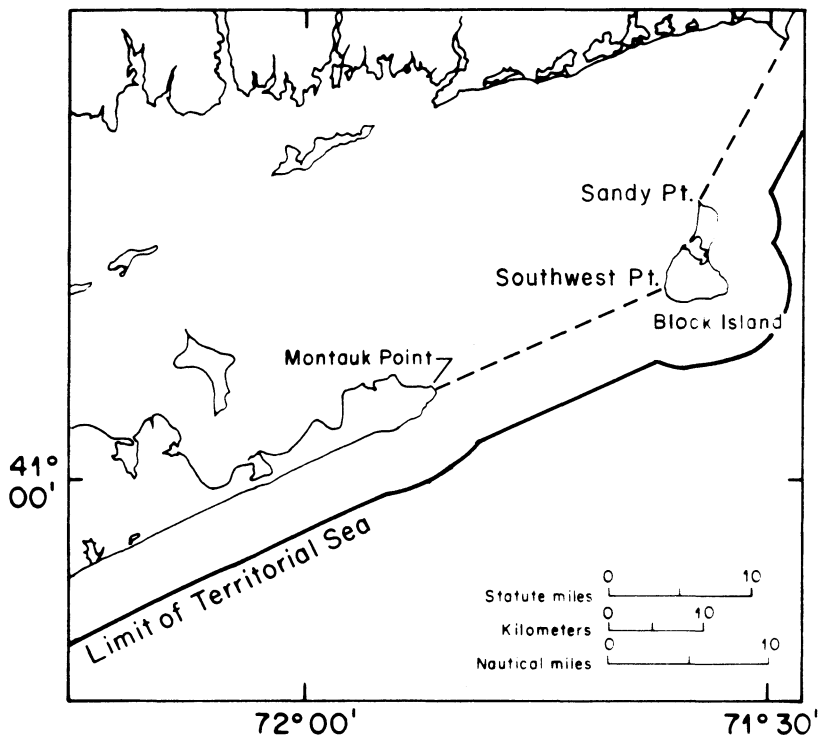
Others will enter the gates of the ferry and cross from shore
to shore,
Others will watch the run of the flood-tide,
Others will see the shipping of Manhattan north and west, and the
heights of Brooklyn to the south and east,
Others will see the islands large and small;
Fifty years hence, others will see them as they cross, the sun
half an hour high,
A hundred years hence, or ever so many hundred years hence,
others will see them,
Will enjoy the sunset, the pouring-in of the flood-tide, the
falling-back to the sea of the ebb-tide.

— Walt Whitman, “Crossing Brooklyn Ferry”

INTRODUCTION

Long Island is 120 miles long from Bay Ridge to Montauk. Its widest point, near Eaton’s Neck, is 23 miles and its area is 1,700 square miles. It is surrounded by the Atlantic Ocean on the east and south, the East River and Hudson-Raritan estuary on the west, and Long Island and Block Island Sounds on the north. To all intents and purposes, Long Island is an island. But is it?

According to international law, an island is “a naturally formed area of land, surrounded by water, which is above water at high tide.”¹ In 1985, through a complex set of legal investigations that seemed to have nothing to do with this definition, the Supreme Court of the United States was challenged to determine whether Long Island is an island or an extension of the mainland.² In this context, the mainland is considered to incorporate Manhattan, which is itself thought of as an island. However, in the case of boundary law, Manhattan is not considered an off-shore island, but rather an integral part of the main continental land mass. In pre-colonial times, it apparently was possible to wade the Harlem River between Manhattan Island and what is now the Bronx; thus separation of Manhattan from the mainland may have been artificial.



Closing Line and Limits of the Territorial Sea Proposed by Rhode Island.

Figure 1

THE ISSUE

The roots of *U. S. vs. Maine et al.*, also known as the Rhode Island and New York Boundary Case, date back to 1969 when the Nixon administration brought suit against the thirteen Atlantic coastal states concerning rights to the seabed beyond three nautical miles. The Supreme Court ruled 8-0 (Justice Douglas took no part in the decision) that the states' rights to the seabed were limited to three nautical miles, but did not decide the geographic coordinates of these limits.³

The determination of the boundaries of the states' marginal seas⁴ is unambiguous when the coastline is long and straight. But when the geomorphology is complex, such as in eastern Long Island, Connecticut and Block Island, there is considerable room for controversy.

Oddly enough, the issue may never have risen had not marine pilots from Connecticut challenged Rhode Island's requirement that foreign and

American vessels, registered for foreign trade and sailing through Block Island Sound, take on licensed pilots of the Rhode Island Pilot Commission. The District Court ruled and the U.S. Court of Appeals of the First Circuit affirmed the Rhode Island statute on the basis that Block Island Sound was a bay within Rhode Island's coastline.⁵ As a consequence, the United States decided that it would serve all interested parties if the legal coastlines of Massachusetts and Rhode Island were determined. The Honorable Walter E. Hoffman was appointed by the Supreme Court as a Special Master to hear arguments.⁶

Rhode Island contended that the "closing line" (the line from which the three nautical mile limit is measured) across Block Island Sound is from Point Judith to Sandy Point on Block Island, and from Southwest Point on Block Island to Montauk Point on Long Island (Figure 1). This would have established all of Block Island Sound as inland waters. The United States treated Block Island as an offshore island so that the marginal sea of Rhode Island would be measured from the low water line along the coast of the mainland, but closing Narragansett Bay from Sakonnet Point to Point Judith. The low water line around Block Island would serve as the boundary for measuring the marginal sea around Block Island.

The United States contended that Long Island Sound was an historic bay⁷ and that the appropriate closing line was from Culloden Point (near Montauk Point), to Orient Point, to Plum Island, to Fishers Island, to Napatree Point, Rhode Island (Figure 2).

How do these arguments affect Long Island and New York State? As part of its argument, Rhode Island claimed that Long Island was an extension of the mainland and not a true island. This argument was based in part on geography but also on much broader issues, including the historic social and political associations between Long Island and the mainland; physical connections (number of bridges and tunnels); and institutional (governmental) ties between Manhattan and Brooklyn. Regarding geography, Rhode Island asserted that Long Island was separated from Manhattan only by the East River, and that this narrow passage was not of sufficient significance to consider Long Island anything other than an extension of the mainland.

If this be so, then Long Island is a peninsula—the southern headland of a bay—and therefore the rules that govern closing lines for bays prevail, thereby establishing the basis for Rhode Island's claim for its marginal sea. Rhode Island also argued that Block Island is a continuation of the same land form (terminal moraine) as Long Island, further justifying its territorial claims. Originally, the state contended that just as Long Island Sound was an historic bay, so was Block Island Sound.

When the Special Master ruled that Block Island Sound was not an historic bay, the parties to the suit did not file exceptions to this determination. Thus for Rhode Island to pursue its case, it was essential that Long Island be considered an extension of the mainland, and that Block Island Sound or portions thereof meet the test of a juridical bay.⁸

New York entered the case rather late, and in general supported Rhode

Island's claims primarily because any decision other than that supporting the United States' would increase the extent of New York's marginal sea.

HISTORICAL PERSPECTIVE

Historical documents provide little assistance or precedent in resolving whether Long Island was considered an extension of the mainland, or its status as an island. *The Remonstrance of New Netherland*, drafted in 1649 by Dutch settlers, states that the East River is so named "because it stretches East from the Manathans (Dutch spelling). This is esteemed by many not a river but a bay, because 'tis very wide in some places, and opens at both ends into the sea."⁹ The Dutch, however, did consider it a river. Thus to some, just as the Hudson River was called the North River because of its direction, so what we know as Long Island Sound was considered to be the East River because of its east-trending direction.

One study states that the early residents who regarded the East River as something other than a river showed "little propriety in denominating it a river."¹⁰ Engineering and scientific studies of the East River, from the latter half of the nineteenth century down to the present day, are followed by the assertion or parenthetical caveat that the East River is not a true river but a strait, tidal strait, or hydraulic strait.¹¹

RELEVANT DEFINITIONS

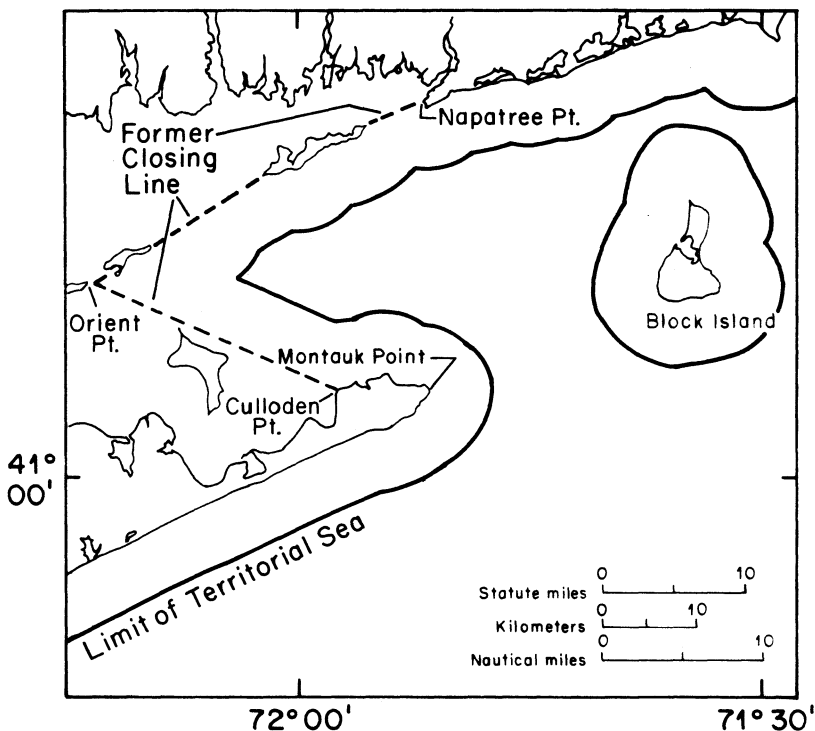
As part of the United States' case, the author, as an expert witness, reviewed the definitions of "river, strait, tidal strait, and hydraulic strait," for the purposes of comparing them with the actual, physical, transport processes in the East River.¹² Even the definition of river had a number of variations, which Swanson et al. distilled to the following:

A natural stream of greater volume than a creek or rivulet, having a freshwater source, flowing, in general, in one direction toward a sea, lake or other river, in a more or less permanent bed or channel, with a current which may either be continuous in one direction or affected by the ebb and flow of the tidal current. The fresh-water flow is controlled by the topographic difference in the head of water between the source and the receiving body of water. Where under the influence of tidal currents, the long-term flux of salt up river must be zero.

A strait, however, is defined as a relatively narrow waterway connecting two larger bodies of water in which water movement is determined by the interconnected bodies.¹³

COMPARISON OF TRANSPORT PROCESSES WITH THE DEFINITIONS

The Long Island Sound/New York Harbor system communicates with the open sea through two connections—The Race at the eastern end of Long Island Sound, and the mouth of the Lower Bay entering into the Atlantic Ocean at Sandy Hook, New Jersey. The semidiurnal nature of the ocean tides is basically preserved throughout the Harbor-Sound system,



Former Closing Lines and Limits of the Territorial Sea (the U.S. Position).

Figure 2

but tidal waves develop within these two water bodies in distinctly different ways. Specifically, the tidal wave in the Harbor is predominantly a progressive wave with tidal heights and currents tending to be in phase, whereas in the Sound the tidal wave is more like a standing wave with tidal heights and currents about 90 degrees out of phase (i.e., strength of current occurs near mean tide level rather than at high or low waters as is the case for a progressive wave.¹⁴ These wave forms meet and interfere within the reaches of the East River, causing it to exhibit a permanent, oscillatory (at semidaily frequency) hydraulic flow regime driven by the two dissimilar wave forms in the larger water bodies at the opposite ends of the passage.¹⁵

Actual sea surface elevation at either end of the sixteen-mile East River varies from tidal cycle to tidal cycle, day to day, week to week, month

to month, and even for longer averaging periods, due to such factors as variations in river discharge, wind stress, direct atmospheric pressure, and salinity distribution. David A. Jay and Malcolm J. Bowman,¹⁶ having evaluated many of these variable factors, determined that on any given day the mean slope or hydraulic head produces in the East River a net flow which may be either toward Long Island Sound, or toward the Upper Bay of New York Harbor, depending on the direction of the average slope. The predominance of the slope towards The Battery increases as the period of averaging increases. They estimate long-term average net flow in the East River to be about 12,000 cubic feet per second directed toward The Battery.

Generally, the long-term mean salinity gradient in surface waters is down toward The Battery. Therefore there is a salt transport to the Harbor due to the longitudinal salinity gradient. The transport of salt in the bottom water layer also operates in the same direction. Since all of the transport processes are operating in the same direction, it is concluded that there is a long-term net salt transport to the Hudson River from Long Island Sound.

Jay and Bowman¹⁷ examined the freshwater sources and transport processes and concluded that the Hudson River provided the freshwater source necessary to maintain the estuarine (fresher water at the surface, saltier water at the bottom) character of the upper East River and Long Island Sound. The mechanism of transport is estuarine, not riverine as per the definition of a river. Further, "freshwater" sources (such as urban runoff and sewage treatment plant effluent) local to the reach of the East River can be of the same order of magnitude as the Hudson River input during low runoff periods. In general, this would be expected to augment the estuarine transport of fresh water from Hell Gate to Long Island Sound.

Based on the definitions of river and strait, and what we know of the flow characteristics in the East River, the East River is in fact a complex tidal strait connecting the Upper Bay of New York Harbor, and western Long Island Sound. While there have been considerable manmade modifications to the channel, particularly over the last 120 years, there is no indication that the basic characteristics have been modified from that of a river to a strait.¹⁸

The controlling mechanism in the flow regime of the East River is due to a mismatch in the heights and phases of a primarily progressive tidal wave moving from Lower Bay into Upper Bay and the Hudson River, and that of a primarily standing tidal wave in Long Island Sound. Throughout most of this system (the lower and middle reaches of the East River) the flow is hydraulic. In the upper reach of the East River (toward the Sound), the flow may be more characteristically estuarine. There is no apparent topographically controlled head of water in the channels between the connected bodies of water. There is a net flux of salt directed oppositely to that of fresh water which is also contrary to the definition of river.

THE COURT'S DECISION

Special Master Hoffman completed his report in 1984. The United States, the State of Rhode Island, and the State of New York filed exceptions and the case was set for oral arguments before the Supreme Court. In February 1985, Justice Harry A. Blackmun delivered the unanimous opinion of the Supreme Court supporting the conclusions of the Special Master¹⁹ that:

1. Block Island Sound in part and Long Island Sound “constitute a juridical bay ... Long Island being an extension of the mainland and the southern head of the bay,” and

2. “... the bay is closed at the line drawn from Montauk Point on the eastern end of Long Island to Watch Hill Point on the Rhode Island shore.” The waters to the west of the closing line are internal state waters, and those east of the line are territorial waters and high seas. Block Island was considered to be seaward of the natural closing line between Montauk Point (the southern headland of the bay) and the exposed headland to the north and therefore not legitimately part of the juridical bay (Figure 3).²⁰

All parties in the case agreed that the fundamental issue to the entire debate was that of whether Long Island is an extension of the mainland. The Court upheld this interpretation, based on the following points:

1. The western terminus of Long Island is an integral part of New York Harbor.

2. The East River historically was a shallow and hazardous passage between Manhattan and Long Island. The “narrow and shallow opening” to the sea compared with the length of Long Island does not make Long Island Sound or Block Island Sound any less of a bay than it otherwise would be. Both the proximity of Long Island to the mainland, the shallowness and inutility of the intervening waters “as they were constituted originally, and the fact that the East River is not an opening to the sea, suggests that Long Island be treated as an extension of the mainland.”

3. “Long Island and the adjacent shore also share a common geological history, formed by deposits of sediment and rocks brought from the mainland by ice sheets that retreated approximately 15,000 years ago,” and,

4. Long Island Sound is not a sea lane for international passage. Unless en route to Long Island, Connecticut or New York Harbor, north-south traffic sails to the east of Long Island.²¹

The court in a footnote acknowledged that the East River is not a river. They also state that it is not simply a tidal strait connecting the two larger bodies of water—Long Island Sound and the Atlantic Ocean. They conclude the footnote by agreeing with the Federal Government that an island formed by a river bank is more likely to be considered part of the mainland than an island separated from the major land mass by a tidal strait. However, they found this “of little use when evaluating the status of Long Island.”²²

ANALYSIS

The Special Master heard arguments concerning the merits of whether the East River was a true river or whether Long Island was separated from the mainland by a strait, but found them of little utility; in his decision, he apparently weighed the historical, political, and physical ties more heavily. However, in terms of geography and oceanography it is significant that the Island is separated from the mainland by a waterway, the flow through which is driven by two independent oceanographic systems. The currents at Hell Gate are on the order of 7.8 feet per second and the volume of water so great that it flushes 127×10^6 cubic feet of sewage effluent out of the East River system each day. In spite of the fact that there have been major channel modifications over the last century, there is no indication based on tide and current measurements before and after these modifications that the general flow characteristics have been changed.

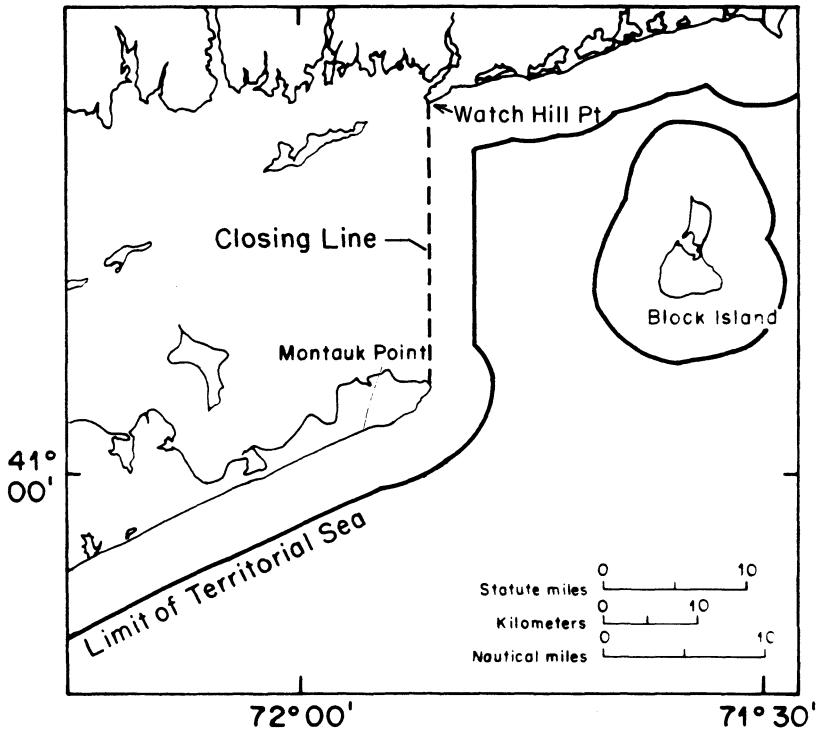
The Court asserts that the East River is a narrow shallow passage. The East River in fact was navigationally attractive to the shipping interest in the mid-nineteenth century. A Long Island Sound passage to the Harbor was considered advantageous as the draft and tonnage of the steam power fleet increased. The depths across the Sandy Hook Bar were too shoal and ocean dredging operations were not yet possible.²³

In my judgement, the court is not correct in its interpretation of the geologic history of the area. Much of the surface geology of Manhattan is composed of a crystalline rock formation known as the Manhattan Schist and is 380 million years old.²⁴ The rock channel of the East River was cut by streams possibly following joints or strikes in the beds.²⁵ The northern part of the channel was probably cut more than 55,000 years ago. Other than the Fordham Gneiss outcropping of Pre-Cambrian origin on the western edge of Long Island, the Island was formed at the conclusion of the last ice advances. The second of the two nearly overlapping terminal moraines was deposited about 12,000 years ago. They merge in the vicinity of Lake Success and continue through Brooklyn across The Narrows and onto Staten Island.²⁶

IMPACT OF THE COURT'S DECISION

The ambiguity of New York's and Rhode Island's seaward boundaries left by the 1985 decision is clearly resolved (Figure 3). The total acreage added to the States' jurisdiction is on the order of seventy square nautical miles. Ironically, New York, almost a passive partner with Rhode Island in the suit, was the big winner in terms of extending the size of its marginal sea, with the consequent authority to exercise control of it. Connecticut never stood to gain.

The psychological price we Long Islanders have had to pay for this is that we now are considered an extension of the mainland. Despite the court's decision, the geology and the geomorphology of the Island and the oceanographic processes of its surrounding waters are consistent with accepted definitions of an island—one that is separated from the mainland by a tidal strait.



Closing Line and Limits of the Territorial Sea as Determined by the Supreme Court.

Figure 3

Nearly a century ago, the Supreme Court decided that the tomato was botanically a fruit, but in common language was a vegetable.²⁷ Other than stimulating curiosity, there has been little impact of that decision for most of us. It is doubtful that the Court's decision in the Long Island case will have much significance for the general public.

However, it would be quite another matter if oil or some other mineral resource were discovered in New York State's newly acquired marginal sea. Certainly the State's taxable revenues would be increased and maybe the individual's tax burden reduced as is the case in Louisiana and Alaska.

Perhaps the greatest impact of the decision will be that of precedent. It is conceivable that this decision could weigh heavily in similar cases—say Alaska, where islands are numerous and seabed resources extensive.

Somehow it does seem appropriate that a commission should be form-

ed to study the need to change the name of our Island to Long Peninsula.

NOTES

1. Aaron L. Shalowitz, *Shore and Sea Boundaries* Vol. 1 (Washington D.C.: *Coast and Geodetic Survey, Special Publication 10-1* , U.S. Government Printing Office, 1962), 296.
2. *United States v. Maine et al.* (Rhode Island and New York Boundary Case), 469 U.S. 504, *The United States Law Week, Supreme Court Proceedings* (Washington D.C.: Bureau of National Affairs, 53 (19 February 1985): 4151.
3. *United States v. Maine*, 420 U.S. 515, 517, n.1, *United States Law Week, Supreme Court Opinions* (Washington D.C.: Bureau of National Affairs, 43 (18 March 1975), 4359.
4. A "Marginal Sea (also called Territorial Sea...or 3-mile limit) is the water area bordering a nation [in this case, a State] over which it has exclusive jurisdiction, except for the right of innocent passage of foreign vessels." (Shalowitz, *Boundaries*, 300).
5. *Warner v. Raplinger*, 397 F. Supp. 350, 355-356 (R.I. 1975).
6. Special Master: "An umpire or referee appointed by a court to take evidence and to make recommendations to the court based" on findings. Shalowitz, *Boundaries*, 314.
7. In international law, an historic bay is one over which there has been "exclusive assertion of sovereignty by a coastal nation and an acquiescence by foreign governments which brings it into the category of inland waters." *Ibid.*, 293.
8. Juridical Bay: "A bay that conforms to the requirements of the law." *Ibid.*, 297. There are numerous tests, mostly dealing with the geometry of coastal indentations, established in international law that guide the determination of closing lines at the mouths of bays.
9. E. B. O'Callaghan, "Remonstrance of New Netherland," *Documents Relative to the Colonial History of the State of New York*, 15 Vols. (Albany: Weed, Parsons and Co., 1856), I:293.
10. Daniel Haskel and J. Calvin Smith, *A Complete Description and Statistical Gazetteer of the United States of America* (New York: Sherman and Smith, 1848), 190.
11. See Henry Mitchell, "On the Circulation of the Sea through New York Harbor," *U.S. Coast and Geodetic Survey, Annual Report 1886*, Appendix 13 (Washington D.C., 1887), 409-411; R. A. Harris, "On the Classification of Rivers, Straits, Bays etc. with Reference to their Tidal Movements," *Extracts from the Manual of Tides* [Committee on Tidal Hydraulics, Corps of Engineers, U.S. Army, 1966 (reprinted from a 1900 report)], 112, 113; H. A. Marmer, *Tides and Currents in New York Harbor*, rev. ed., Coast and Geodetic Survey, Special Publication 111 (Washington D.C.: U.S. Government Printing Office, 1935), 78; Malcolm J. Bowman, "The Tides of the East River, New York," *Journal of Geophysical Research* 81, No. 9 (1976): 1609.
12. R. Lawrence Swanson, Charles A. Parker, Michael C. Meyer and Michael A. Champ, "Is the East River, New York, a River or Long Island an Island?" *International Hydrographic Review* LX, No. 1 (1983): 137-157.
13. *Ibid.*, 139.
14. R. Lawrence Swanson, *Tides* (Albany: New York Sea Grant Institute, Atlas Monograph 4, 1976) 27.

15. Marmer, *Tides and Currents*, 78,79, 167, 182.
16. David A. Jay and Malcolm J. Bowman, *The Physical Oceanography and Water Quality of New York Harbor and Western Long Island Sound* (Stony Brook: Technical Report 23, Marine Sciences Research Center, USB, 1975), 13, 14.
17. *Ibid.*, 22
18. Swanson et al, *East River*, 154.
19. *United States v. Maine* (1985), 4152.
20. In December 1988 President Ronald Reagan announced that the territorial sea would be extended from three nautical miles to twelve nautical miles, for international purposes only. It is not clear how this may relate to State waters.
21. *United States v. Maine* (1985), 4155.
22. *Ibid.*, 4155.
23. Marion J. Klawonn, *Cradle of the Corps* (New York District, U.S. Army Corps of Engineers, 1977), 74, 75.
24. John Kieran, *A Natural History of New York City* (New York: Fordham University Press, 1982), p.20.
25. Myron L. Fuller, *The Geology of Long Island* (Washington, D.C.: U.S. Geological Survey, Professional Paper 82, U.S. Government Printing Office, 1914), 24,25.
26. Warren E. Yasso and Elliott M. Hartman Jr., *Beach Forms and Coastal Processes* (Albany: New York Sea Grant Institute, Atlas Monograph 11, 1976), 10.
27. *Nix et al. v. Hedden, Collector*, 149 U.S. 304, *Supreme Court Reporter October Term 1892* (St. Paul: Vol. 13, West Publishing Co. 1893), 881.

ACKNOWLEDGEMENT

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REVIEWS

PETER MATTHIESSEN. *Men's Lives: the Surfmen and Baymen of the South Fork*. New York: Random House, 1986. Illustrations, notes, index. 339 pp. \$29.95.

The historian Frederick Jackson Turner wrote that the American character was shaped by the frontier, but we forget that the great inland continent begins at the shore. *Men's Lives* locates its shore along the South Fork of the fish-tailed island which Native Americans and Walt Whitman called Paumanok. And Peter Matthiessen—Yale, class of 1950, long-time resident of Sagaponack, founder of the *Paris Review*, author of numerous fiction and non-fiction books including *At Play in the Fields of the Lord*, *Far Tortuga*, and *The Snow Leopard* (which won the National Book Award)—loves its details.

Men's Lives, a work of non-fiction, is about the baymen who ply the waters from Southampton to Montauk, netting, trapping, dragging, shellfishing, and setting pots. They are engaged mainly in commercial ocean haul-seining, which no longer exists anywhere else in the United States except on the outer banks of North Carolina. These baymen, Matthiessen's heroes, are fiercely proud, independent, and rugged. Plagued by taxes, bureaucrats, permits and licenses, tourists, inflation, real-estate development, sportsmen, and pollution, their range has constricted, their numbers dwindled, their status diminished. There are scarcely one hundred baymen left on the South Fork, and Peter Matthiessen is their sympathetic chronicler, his lucid text amplified by a vivid assortment of drawings and documentary photographs.

Once the leading families, the baymen now occupy the bottom of the still heterogeneous social ladder, subsisting in the last poor corners of the increasingly expensive Hamptons. Descendants of seventeenth-century New Englanders and heirs to the local traditions of the Indians who worked the surf and ponds before them, their speech resonates with the Kentish and Dorset inflections of Elizabethan England. But they are tragically doomed, and "may soon become rare relics from the past," like the Atlantic right whales their ancestors harpooned from ships sailing out from Sag Harbor.

Between a preface which provides overview and an epilogue which serves

as an elegy, the twenty-three chapters of *Men's Lives* are organized into a three-part melodrama: the old days, the 1950s, and modern times. The book is rich with a sense of place, respectful of a folk history ordered by nature, its changing landscapes, seascapes, seasons, sights, smells, and textures. The baymen, close to nature but yet its exploiters, are enmeshed in a metropolitan economy, ruled as much by fluctuating prices at the Fulton Fish Market and the politics of Albany as by the mysterious demography and migration of striped bass. Matthiessen gets into their lives. We hear their voices, sometimes petty, usually proud, frequently bewildered, increasingly resigned.

Matthiessen sees the world as his macho heroes view it. Their enemies are his enemies. The sportsmen, lobbying for anti-commercial bass fishing legislation, are described as hypocrites and money-minded fanatics. He properly despises the Montauk charter captains for bilking customers and engaging in racism, but ignores those same characteristics in his baymen. A member of the elite establishment of old money, Matthiessen shares the baymen's bias against both the new wealth of vacationing New Yorkers and the permanent middle-class "up stretters" from the local villages. Matthiessen displays a need to be "accepted" by the baymen as an "honorary fisherman"; only once does he acknowledge that "he could afford to romanticize this life."

But Matthiessen's love of the East End is real, and it shows in the simple evocation of places and events, his solidarity with and empathy for the baymen, his intelligent detailing of bass legislation and public policy, and his own genuine commitment to "fishing as a way of life." His book recounts the baymen's personal tragedies and hardships, informs us of the history of fishing for whale, sturgeon, swordfish, and bass, and reminds us that we can choose our lives. *Men's Lives* is in apposition to and an antidote for the vacuous, mean, deadly world of *The Bonfire of the Vanities* (New York, 1987), in which the protagonist in Tom Wolfe's novel maintains his obligatory weekend-summer house in the Hamptons. Matthiessen understands these worlds, and sometimes ranges beyond the political provincialism of his beloved baymen, explaining the impersonal and powerful corporate and ecological issues that doom his heroes. Yet he retains a healthy respect for the baymen's magical belief that the ways of fish are beyond reason, even to the marine biologist, and that "the bass will return." The bass, of course, is the life-sustaining symbol of the baymen, and Matthiessen recognizes that as symbol, if not as fact, it will go the way of the buffalo, and with it the passing of a way of life.

Matthiessen would like us to identify with the struggle of these vanishing baymen, to decry the passing of their beautiful, haunting world, to grieve the end of this last enclave of the American frontier. And we do. But *Men's Lives* is one-dimensional, hopelessly captured by a sanitized romantic vision. Only inadvertently do we hear the other voices, the petty politics, the envy, the greed, the bigotry, the self-serving, the carelessness, the reactionary political and social attitudes. We learn little of the families, the wives and daughters—*Men's Lives* is seen through men's eyes. Matthiessen

has not done for the baymen of the South Fork what Lawrence J. Taylor has done for the oyster fishermen of West Sayville in *Dutchmen On the Bay: the Ethnohistory of A Contractual Community* (Philadelphia, 1983). *Men's Lives* fails as balanced history and critical sociology. It succeeds as primary testimony, as legend, as myth. But we are grateful to Matthiessen for insisting that we remember, in the words of Sir Walter Scott, "It's not fish ye're buyin, it's men's lives."

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GRANIA BOLTON MARCUS. *A Forgotten People: Discovering the Black Experience in Suffolk County*. Setauket: Society for the Preservation of Long Island Antiquities, 1988. Illustrations, documents, glossary, bibliography. 152 pp. \$10 (paper) plus \$1 for postage and handling, from the Society for the Preservation of Long Island Antiquities, 93 North Country Road, Setauket, NY 11733.

This exceptional new study not only brings to light a largely unexplored subject, but breaks new ground as a teaching tool from elementary to college levels. A provocative blend of documents, commentary, and learning activities, *A Forgotten People* promotes the use and value of primary sources as learning aids while it examines the history and contribution of Long Island's black residents from the seventeenth century through 1860. The author, Grania Bolton Marcus, describes her text as a "practical work book" for classroom and independent study, designed to stimulate readers actively to interpret the data she has collected. Marcus presents more than one hundred wills, letters, diaries, account books, statutes, and other archival tools to draw the reader into the excitement of archival research.

Its format is the key to the book's successful organization of so much diverse material. The seven chapters cover "The Work of Slaves," "Daily Life," "Gaining Freedom," and other basic topics, each built around documents pertinent to its theme. Every chapter has an introduction and a biographical sketch of a key person, followed by a "study document," questions about it, an essay question, a creative writing question, and a suggestion for further research on a related topic.

The follow-up assignments are well thought out and engaging, especially those on creative writing, which call for a short story, script, or newspaper article (although the assignment for "Gaining Freedom" is somewhat vague). To imagine themselves as exhibit designers, television producers, or journalists writing about slavery should encourage students to think freshly about the data.

The range and variety of the documents is the real beauty of this book, reflecting Dr. Marcus's years of research. To bring so many together in one easily accessible text is an invaluable aid to teachers and scholars. Selections include Jupiter Hammon's 1787 "Address to the Negroes of the State of New York"; an excerpt from Elias Hicks's 1811 antislavery

essay, "Observations on the Slavery of the Africans and their Descendants..."; and Henry Highland Garnet's speech at the 1843 National Convention of Negro Citizens. Passages from the account books of Dr. Joel L. Griffing and other Suffolk County healers, with or without an M.D., give examples of how slaves were cared for, and are useful to current researchers on the health and medical treatment of African Americans in the era of slavery.

Particularly striking are those documents which capture, if only in glimpses, the point of view of both enslaved and newly-freed African Americans. A letter from Henry Lloyd describes his slave Aurelia as "obstinate in refusing to come" from Brookhaven to Queens Village, the Lloyd family's manor. A 1791 newspaper announcement offers six pence for the return of Tom, "between 90 and 100 years of age...about 4 feet high, Africa born..." Tom's break for freedom, in spite of his age, underscores the slaves' undying desire for liberty. One of the rare extant documents produced by an African American and preserved in the public archive is an 1819 letter to Elias Smith from a Bridgehampton freedman, Cato Crook.

Given the author's rich documentation, her often tepid rehash of old generalizations is somewhat disappointing; the evidence she has marshaled would support a more two-fisted set of conclusions than she is willing to essay. She repeats the axiom that most Long Island slaves were held singly or in pairs, "isolated from one another" and "in close proximity to their masters." Thus the notion is perpetuated that these slaves were atomized, alienated, and related primarily to the master's family for socialization and sense of self. On the other hand, Marcus presents considerable evidence that related African American slaves often lived in the same household. She includes the remarkable example of an intergenerational unit—a man and a woman held in slavery with their grandchild, in the same dwelling place.

From the wills she cites, it is clear that when the principal owner died the slaves were parceled out to members of the family. Even then, when some found themselves held "singly," a slave's ties to his or her relatives were perhaps not effectively severed. Did the heirs continue to work the same land, and live in the same house or village? The evidence of related slaves being inherited by succeeding generations of owners has important implications for any discussion of African American family life, the passing down of values, and the maintenance of an African American and/or Amerindian identity. Merely to repeat the standard generalization that most owners held one or two slaves undersells the striking data on slave families that the author has included. For example, in Dr. Joel L. Griffing's day books, he "apparently recognized the existence of slave marriage (by) using the term 'wife.' "

In addition to her assembled documents, Marcus makes telling comments on the institution of slavery and the role of African American history in challenging many comfortable assumptions about American society. She gives a thorough and readable account of the historiography of slavery;

her explanation of how her research fits into the scholarship of past and current black history is ambitious and well written.

A Forgotten People correctly contrasts the stereotypically cruel slavery of southern plantations with the smaller-scale, domestic version practiced on Long Island. However, in her effort to present a balanced view of the latter, in a few places Marcus in effect has sanitized the institution. She may have wanted to steer away from the harsher aspects of slavery, but in so doing, she leads one subliminally to assume that African people, for the most part, willingly accepted their role as slaves. A glaring example of this apparent glossing over of the terrorism and violence that necessarily was built into maintaining the system of slavery is her handling of the murder of the Hallet family of Newtown, Queens, by two of their slaves, in 1708. After mentioning the killings, Marcus follows with a quick disclaimer that punishment was not always as severe as authorized by law. Yet in this case the sentence was gruesome; the man was tortured and hanged in chains, the woman burned at the stake. Marcus rightly observes that the most severe punishments were not always applied, but neglects to report that in this case, the maximum sentence was carried out. Clearly, only a few such examples of slow and horrible death were enough to impress upon bondsmen the consequence of armed rebellion against their masters.

Except for these few shortcomings in analysis of the data or in somehow neutralizing the institution of slavery, *A Forgotten People* is an outstanding achievement that sets a new standard in the study of local history. The careful, consistent, and thoughtful use of documents give this book enduring value as a social studies/history teaching tool. As the author correctly points out, much of the human drama of this story will remain untold until more letters, diaries, and private papers of the African Americans themselves are located and made available to the public.

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SALVATORE J. LaGUMINA. *From Steerage to Suburbs: Long Island Italians*. Staten Island, NY: Center for Migration Studies, 1988. Illustrated, appendices, index. 284 pp. \$17.50 (cloth), \$12.95 (paper).

The Census Bureau defines "suburbia" as all areas within a metropolitan area except central cities. Since the 1920s, Americans have become an increasingly suburban people, more of whom now live in suburbs than in central cities. Improved transportation, federal programs, cheaper land, more modern facilities, and the promise of a better life are offered as some of the reasons why families and businesses have migrated to the suburbs. It is logical, therefore, that scholarly research should turn to the implications of such change.

Salvatore J. LaGumina's seminal study, *From Steerage to Suburbs: Long Island Italians*, analyzes suburbia from the neglected dimension of

ethnicity, especially Italian Americans'. It acknowledges the profound demographic shift from urban to suburban, but overlays this with the ethnic factor. Heretofore an almost exclusive emphasis has been placed on ethnic studies from the perspective of the city, much of it warranted for obvious demographic reasons. This study excludes urban Brooklyn and Queens and confines its attention to Nassau and Suffolk.

The author, a professor of history at Nassau Community College and an expert in Italian American studies for more than three decades, contends that while the mass movement to suburbs occurred after World War II, there is a lack of serious research addressing the "meaningful roles" played by Italian Americans "in the histories of Long Island suburbs long before the 1940s." He is at odds with Richard D. Alba's thesis in *Italian Americans, Into the Twilight of Ethnicity* (Englewood Cliffs, NJ, 1985). For Alba, suburbanization has meant total assimilation of this ethnic group in the mainstream of American life; "No acknowledgment," claims LaGumina, "is given to the possibility of a meaningful ethnic consciousness or ethnic viability."

LaGumina carefully probes the history and socialization of Italian Americans in the major communities of Inwood, Port Washington, Glen Cove, Westbury, Copiague, Patchogue, and others since mass immigration began in the 1880s. The current population of 700,000 Italian Americans—one-fourth of the area's total—is the largest ethnic group in Nassau and Suffolk Counties and therefore merits scholarly attention. He has investigated such primary sources as deeds, tax records, voter directories, records of business and civic groups, and mutual aid societies, autobiographical accounts, church documents, census data, doctoral and masters theses, newspapers and other published material, and interviews, a task requiring more than ten years. His eight-page bibliography will be useful for those who wish to pursue further study.

LaGumina's treatment of fascism touches a controversial issue, especially in light of earlier research. Philip V. Cannistraro's standard study of Italian American ethnicity from 1924 to 1945 (introduction to Gaetano Salvemini, *Italian Fascist Activities in the United States*, Philip Cannistraro, ed. ([New York, 1977])—a time when Mussolini's fascism dominated the homeland—presents a revealing comparison. In this period of intense feeling in the United States, Italian Americans were viewed with suspicion and forced to define themselves. Cannistraro concluded that they were drawn to fascism because American society discriminated against them, and, although most of them were not fascists, the propagandized image of the movement evoked a sense of pride in their heritage. LaGumina agrees that the rise of Italian fascism produced a "dilemma," but he detected only a minimal fascist presence on Long Island. Once the United States entered World War II, Italian Americans "took to the colors, whatever regard they may have had for the land of their forbears." The author cites the high rates of participation in a 1942 Honor Roll of Glen Cove service men that included six Nigros, six Copobiancos, six Dileos, five Pascuccis, and four Abbondondolos.

The book covers early settlement patterns in Nassau and Suffolk Counties. Other carefully depicted topics are work, prejudice, religion, and civic affairs. The political roles of Italian Americans in local community life attested to their social mobilization. Institutional family life became an ongoing unifying theme in their achievement of ethnic success. To this group, its experience in suburban Long Island is the American dream come true.

Although it makes a major contribution to understanding the process of Americanization in a suburban setting, *From Steerage to Suburbs* has limitations. The listing in Appendix I of the largest Italian American concentrations in 1980 tempts one to want information on the many communities not investigated. Despite the author's admission that it was impossible to study the history of every town and village, a reader may wonder at the omission of such communities as Deer Park, Elmont, Shirley, and North Lindenhurst, all with Italian American populations of more than 40 percent. The role of women could have been given more attention, as well as the topic of Italian Americans in sports.

This innovative book establishes the following premises: that the dynamic of ethnicity has been a persistent force in suburbia; that Long Island is an archetypical suburb; that Italian Americans have contributed to community life; that this study can serve as a model for future ethnic-suburban research; and that it fills a void in the study of American civilization. In his account of five generations of Italian Americans in a suburban environment, Professor LaGumina once again has provided evidence of ethnic diversity in the United States.

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RONALD G. PISANO. *Long Island Landscape Painting 1820-1920*. New York: Little Brown, 1988 — "A New York Graphic Society book." Illustrations (chiefly in color), notes, bibliography, index. Pp. iii, 167. \$24.95 (paper [first pub. 1985, \$45.00, cloth]).

Before there were tract homes, shopping malls, parkways, or airports, there existed a relatively untouched landscape that was Long Island's. After World War II, however, with the advent of the Levitt House and arrival of suburban sprawl, the topography of Long Island received an unalterable "facelift" that seared its flesh for generations to come, if not forever.

This, among other ideologies, is the credo of Ronald Pisano's *Long Island Landscape Painting 1820-1920*. This past director of the Parish Art Museum (Southampton) and former curator of the Museums at Stony Brook chose a period in which "the gods" shone favorably upon this blessed Island. It was a time when talented "painters from New York joined the ranks of resident artists...in delineating the changing face of Long Island." Their works sensitively rendered "the lyrical qualities of Long Island's expansive landscape and its surrounding waters," focusing on

“the agrarian life of its natives” as well as on its cosmopolitan “seaside resorts, its industries, and its bountiful natural resources.”

The pastoral, genre paintings of William Sidney Mount (four of which are reproduced in the book) truly caught on canvas what it was and how it looked, “at ease with the world,” as the poets say. Mr. Pisano carries the reader back through an almost “time-tunnel” into a utopian “Garden of Eden” world that was once Long Island.

From the illustrations, the reader vicariously is carried into a “wonderland-in-a-rocket.” One sees, for example, *The Sharpie Race* (in Port Jefferson Harbor), by the painter and boatbuilder, William M. Davis, who “continued in Mount’s footsteps”; Edward Lange’s majestic *Residence of Thomas R. Smith, Smithtown, L. I.* (1880); an unknown artist’s the *Lofty Lighthouse at Fire Island* (ca. 1887); or Ralph Albert Blakelock’s bewitching *Rockaway Beach, Long Island, New York* (1869-70). Long Island’s romantic terrain is interpreted dramatically by William Hart’s *Landscape—Sunset on Long Island* (ca. 1856), or Robert Bruce Crane’s *Southside Sportsmen’s Club, Oakdale, Long Island, New York*. The reader’s understanding is enhanced by the occasional placement of a site-photograph next to the corresponding painting.

The author presents biographical sketches, encapsulating the style, mode, pictorial manner, and personal essence of each of the artists. One such talented hero is William Merritt Chase, who in 1891 “established the first major outdoor school of painting in America...in the township of Southampton.” Chase, an American Impressionist who thoroughly understood the techniques of European Impressionism, perhaps best epitomized what Long Island was in its so-called “Golden Age”; his themes come to life in the book’s lively color illustrations. J. A. Weir, John H. Twachtman, and the great Child Hassam also are observed and well-illustrated as they painted Long Island’s topography with an Impressionist point of view.

It is fascinating, in this volume, to see the development from a nineteenth-century “descriptive literalism” in depicting scenes to a more surface-technique suggestiveness of the twentieth century. And yet, even though styles may change, Long Island is seen as a world of near perfection during the century of artistic creativity chosen by Mr. Pisano.

Equally important—and perhaps unknown to many—is that Winslow Homer painted at East Hampton in 1874, to be followed by George Bellows, whose canvases captured the salty mood of Montauk on his honeymoon in 1910. Such facts make the book important for the art historian as well as the art appreciator; its piquant investigation of *who* painted and *why* they did are essential to fully understanding the Island’s artistic tradition.

Pisano’s introductory essay concludes with the observation that after World War I several decades would pass until, with the coming to Springs of Jackson Pollock and Lee Krassner, the Island again became a seedbed of artistic development; “What developed, however—abstract expressionism—was not derived from Long Island’s evocative landscape.”

The illustrations, especially in the paperback edition, are quite good in their verisimilitude. Finally, the bibliography is very helpful for those who want to do further research on individual painters.

GEORGE M. COHEN

Fine Arts Department, Hofstra University

BOOK NOTES

Robert Moses, Single-Minded Genius, Joanne Krieg, ed. Interlaken, NY: Heart of the Lakes Publishing, 1989. Illustrations, index. 222 pp. \$30 (cloth), \$18.00 (paper). An absorbing collection of papers about the controversial "power broker," presented in June, 1988, at the conference, Robert Moses and the Planned Environment, sponsored by the Long Island Studies Institute of Hofstra University. This book will be reviewed in our next issue by Professor Lee Koppelman, USB.

Our Spring 1990 edition will also offer reviews by Professor Stuart Ewen, CUNY, of two new books on the 1939 New York World's Fair: Barbara Cohen, Steven Heller, and Seymour Chwast, *Trylon & Perisphere: The 1939 World's Fair* (New York: Harry N. Abrams, Publishers, 1989); and Larry Zim, Mel Lerner, and Herbert Rolfes, *World of Tomorrow: The 1939 New York World's Fair* (New York: Harper & Row, 1989).

Lincoln Diamant. *Chaining the Hudson: the Fight for the River in the American Revolution*. New York: A Lyle Stuart book published by Carol Publishing Company, 1989. Appendix, bibliographical notes, index. 233 pp. \$21.95 (cloth). The dramatic story of the Hudson River and its key role in the victory of the American Revolution, with emphasis on "Washington's Watch Chain," the 1700 foot chain that was winched across the river at West Point to thwart the Royal Navy from ascending the Hudson and splitting the colonies. Long Island references are to Bushnell's submarine in the Sound, and the battle of Brooklyn.

COMMUNICATIONS

Dear Sir:

I was thrilled to receive my second copy of the *LIHJ* and I immediately opened it to check the topics. Several caught my eye and I started to read the essays. Much to my chagrin, some pages were blank! I am sure it is a printing error. Is it possible to send another copy?....I was pleased that Mr. Smits' essay, "The Creation of Nassau County," was published in its entirety.

Anastasia E. Harrington

President, West Hempstead Historical Society

Response:- We apologize for occasional defective copies, which we will replace by return mail as soon as we are notified.

Dear Editor:

Judging from the two premier issues, it seems that the *LIHJ* is destined to be a very important source for those interested in Long Island's past. Our library is pleased to subscribe to this fine publication, and we will designate it as a "permanent" periodical so that all issues will be retained for study.

It would be most helpful...for you to publish an index to articles and book reviews, perhaps in the final issue of each year...Good luck to you on this fine endeavor.

Katharine N. McNeill

Director, Floral Park Public Library

Response:- We completely agree with Ms. McNeill and others who recommend an index, which we will have beginning with Number 2 of Volume 2 (to cover our first four issues—Fall 1988 through Spring 1990), and every two years after that.

Dear Mr. Wunderlich,

On page 11 of your first issue (Fall 1988, which I thoroughly enjoyed), reference is made to World War I military flight training at Roosevelt and Mitchel Fields. My father, Col. Verne L. Rockwell, was commanding officer at the major flight training field on Long Island at Mineola—*Hazelhurst Field*. I have a photo of him standing before a "Caproni" bomber, Italian made, which crashed shortly after the picture was taken. However, most of the planes used for training were "Jennies."

The wooden hangars of Hazelhurst remained in use well into the late 1930s and early '40s. The name of the field alternated between "Curtiss"

and "Roosevelt" after World War I.

I look forward to your next issue.

C. Embree Rockell
Captain, United Airlines, retired

Dear Editor:

I wish you great success in this timely undertaking...As Virginia Eckels Malone, our Town Historian drummed into me: if you are going to quote, quote exactly; check correct spelling of names. The surname of former Town Historian Nick "Michichi" (p. 151, Spring 1989) should be spelled *Micciche*...

I would be interested in a history of water on Long Island: well-drilling, artesian wells, the falling water table, etc...My artesian well delivered 11 gals. per minute in 1971 and the overflow ran into a tributary of the Nissequoque River. Now I get 3 cups per minute. Where will it end?

Mrs. Albert G. Ganz
Head-of-the-River, Smithtown

Response:- We apologize to the Micciche family in particular and to all of our readers in general for inexcusable proof-reading errors that slip into print now and then. As for the history of Long Island's water, stand by for a forthcoming article on this extremely important subject.

Dear Dr. Wunderlich,

It is a pleasure to renew my subscription. We find your Journal extremely interesting and informative...

Dennis D. O'Doherty
Records Management Officer, County of Suffolk

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