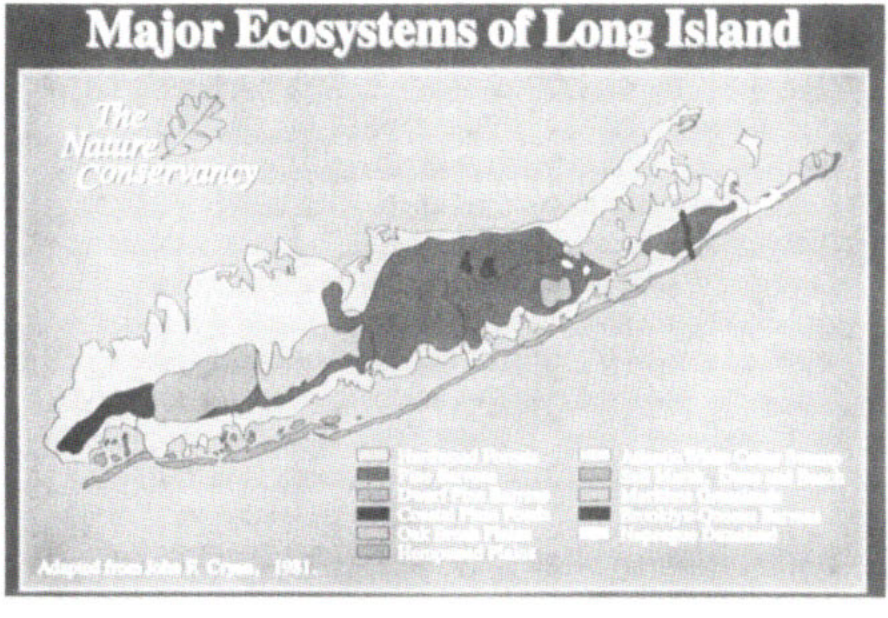
FOREWORD

Just two miles south of the Old Field home where Robert Cushman Murphy did so much of his writing, stands one of the last surviving milestones of the pre-revolutionary highway that connected Long Island's North Shore communities to one another. This carefully carved stone sign still serves admirably as a pathfinding directional for any traveler who takes the time to find and read it.

Similarly, anyone who takes the time to find and read the message of this small, but remarkable book will discover an important milestone along the road of Long Island's environmental history. Carefully carved by one of the greatest natural scientists this country has ever produced, Fish-Shape Paumanok *is as vital, inspiring and meaningful today as when it was first written.*

Long Island's geologically youthful terrain is the "canvass" upon which Paumanok's life zones are "painted". (Photo courtesy of The Nature Conservancy)



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Dr. Murphy's essays that make up this book were originally prepared for oral presentation to the Penrose Society in 1962, and were subsequently published in 1964 by the American Philosophical Society. The book stands as a milestone in the history of conservation because it was the first really literate publication to present Long Island in its context as an environmentally and historically distinct region of the United States. In so doing, it expanded Long Islanders' sense of community from the boundaries of their neighborhoods to the entirety of Long Island. This conceptual framework of regional intradependence still stands as a paradigm on which a large and growing human population can base ever more urgent environmental stewardship decisions.

During the first three quarters of this century, Robert Cushman Murphy (1887-1973) watched as the natural systems of his native island were radically altered. He watched one of the most dramatic, human-induced instances of whole ecosystem destruction as all but a few acres of the Hempstead prairie disappeared under the bulldozer's blade to become Levittown. He watched as dredge and fill operations destroyed over half of Long Island's tidal salt marshes, and as vacation houses and new roads planned for the Fire Island Barrier Complex threatened to destroy miles of Atlantic Ocean-facing dunes. Unique coastal habitats such as the Sunken Forest that Dr. Murphy had studied, written about and loved for more than half a century, and the vast Pine Barrens interior of Suffolk County — an ancient forest and freshwater wetland complex standing atop the untapped, untainted aquifers of Eastern Long Island — were being invaded by tract housing, shopping centers and webs of roads.

It is clear that these harsh realities were very much on Dr. Murphy's mind when he wrote Fish-Shape Paumanok, *for in it he repeatedly lamented the historical lack of respect for*

Red Maple Swamp is a rare habitat in the Pine Barrens near Hampton Bays. (Photo by S. Englebright)

Long Island's wild lands and life. This lack of respect was based, at least in part, on an environmentally unsophisticated population that was divided into dozens of small political entities. The limitations of natural systems were easily overlooked by local land or water use boards, each of which was answerable only to their own exploding population. Prior to the publication of Fish-Shape Paumanok, *this tendency towards balkanized decision making was aggravated by the lack of any readable or available written source that presented an Island-wide perspective. Through compellingly presented information, Dr. Murphy's book led the way toward change.*

It is difficult to understand Fish-Shape Paumanok *without knowing something about the extraordinary man who wrote it. Born on April 29, 1887, Dr. Robert Cushman*

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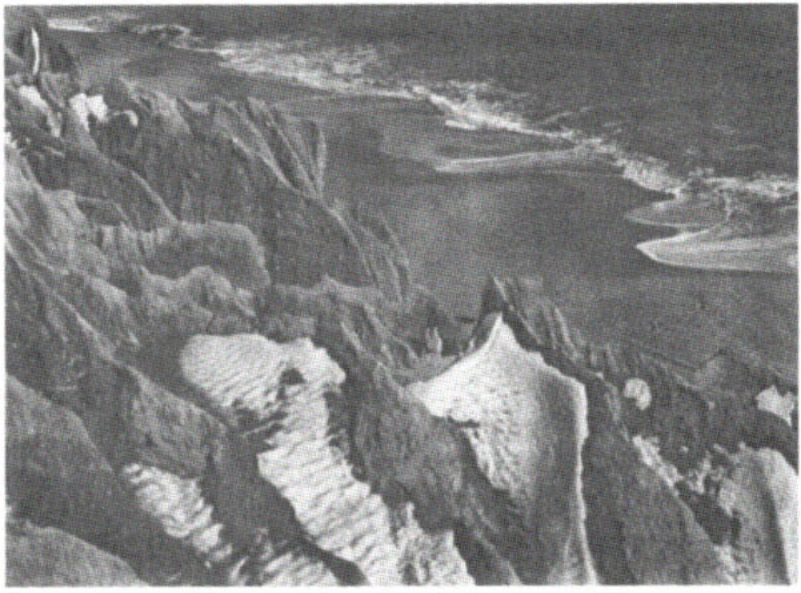
Murphy was a native son of Long Island who emerged in his professional life as an internationally respected scientist, author, explorer and educator. As Lamont Curator of Birds at the Department of Ornithology of the American Museum of Natural History, he was widely regarded as the foremost authority on birds of the world's open oceans. As an environmental spokesperson and advocate, he was instrumental in helping citizens of this nation and the world appreciate the importance of conserving unique, natural habitats and significant animal and plant populations.

Murphy began his scientific career in 1912 as assistant navigator-naturalist on a year-long voyage aboard the whaling brig Daisy, which he describes in his book, Logbook for Grace. *This Darwin-like sojourn through the southern seas to Antarctica profoundly influenced young Murphy's outlook on the relationship between nature and mankind. Ultimately, his impressions aboard ship, combined with his*

Robert Cushman Murphy and a red-footed booby. (Courtesy of the American Museum of Natural History)



Among Paumanok's geological wonders is this "badlands" topography near Montauk Point. Snow highlights the eroding glacial till. (Photo by S. Englebright)

observations of the accelerating pace of global habitat destruction, fused with his reverence for living things to produce the purposeful resolve of one of the nation's pioneer preservationists.

In Dr. Murphy's day, it was unusual for scientists to become involved in controversial issues. However, Dr. Murphy was a man of great courage, conviction and vision. He became the leading voice for the scientific community, speaking to the public on important issues such as saving marine mammals from extinction, protecting bird nesting areas, and conserving whole habitats through land preservation.

He spoke at public hearings and wrote essays calling for the protection of Long Island's salt marshes, barrier islands, forests and Pine Barrens. He narrated the film And So Ends, *calling for the preservation of the great whales, and vigor-*

ously defended another visionary activist, Rachel Carson, and her revolutionary book, Silent Spring. *He energized the grassroots drive to establish the Fire Island National Seashore and was the founder and first president of one of Long Island's most effective conservation organizations: the Long Island Chapter of the Nature Conservancy.*

Dr. Murphy was among the first to express a deep understanding and respect for the forests and wetlands that comprise the Long Island Pine Barrens. He was the first to articulate why these habitats should be preserved as public parkland, particularly the portion that is the headwaters of the Peconic River. In 1960, he led a successful citizen initiative which established that area as the first major natural park in the Suffolk County Park system.

This view of the Pine Barrens near Riverhead looks south across a vast glacial outwash plain. (Photo courtesy of the Museum of Long Island Natural Sciences)

Apparently Dr. Murphy knew qualitatively what has recently been established quantitatively: that the Calverton Pond Complex in the upper reaches of the Peconic's catchment basin contained one of the greatest concentrations of rare, threatened and endangered plants and animals in New York State. Appropriately, on April 29, 1987, the 100th anniversary of his birth, this park was renamed the Robert Cushman Murphy Peconic River County Park.

Dr. Murphy would be pleased to know that the Long Island environment continues to be influenced by his life's work as expressed in Fish-Shape Paumanok. *His book provided the thematic inspiration for the Museum of Long Island Natural History at Stony Brook University. Since 1978, over 300,000 people, including a whole generation of Long Island school children, have learned from its exhibits and educational programs.*

Fish-Shape Paumanok *also helped to build the foundation of understanding which was critical to the successful launch of conservation initiatives in 1986 and 1987. These programs, which are still in progress, have provided over a third of a billion dollars for parkland acquisition in Suffolk County and have served as national conservation models. Many thousands of acres of Pine Barrens and other unique natural areas have been preserved. Perhaps predictably, it was through the Long Island Nature Conservancy, which Dr. Murphy founded, that the most precious of these lands were acquired.*

The bittersweet message of Fish-Shape Paumanok *is at once Robert Cushman Murphy's celebration of the magnificent environment and history of Long Island that inspired him; a chronicle of man's destructive tendencies as they found focus on this sandy strand; and a gentle warning to change our ways. Although it weaves history and natural*

An upside-down Horseshoe Crab molt. As this "living fossil" indicates, life is ancient on Paumanok's shore. (Photo by S. Englebright)

The Marsh Elder's late summer bloom is nature's promise of renewal. (Photo by S. Englebright)

history into a time-sequenced story, Fish-Shape Paumanok *is not just a book about the past. Its broad scope still provides a Rosetta Stone enabling all who would know to decipher the hieroglyphics of ecology. The relationship between nature and man will continue to be of paramount importance to this earth, and both sides of the equation will continue to benefit from the quiet message of this book.*

STEVEN C. ENGLEBRIGHT
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