AN INTRODUCTORY GUIDE TO STRATFORD'S NATURAL ENVIRONS

By the Town of Stratford Conservation Commission

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BY

THE STRATFORD CONSERVATION COMMISSION

APRIL 1990

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PREFACE

Three hundred and fifty years ago, the first settlers of Stratford were concerned with: "taming the wilderness and putting it to man's best use". The reason for these thoughts was survival. In the years after our founding, the town grew to take on a sleepy little town character, which many people fondly remember. Even so, many natural resources were being exploited and were diminishing. Today, it seems there is still the call to: "tame the wilderness and putting it to man's best use". Today, the reason for these thoughts is purely, profit. We don't have to choose between a healthy environment and a healthy economy, if we are a thinking people.

This book is dedicated to the twentieth anniversary of Earth Day. The Environmental Movement is concerned with many topics, but the most important, from a Naturalist point view, is preservation of habitat. Stratford still has some natural areas which its townspeople and wild creatures can enjoy. This book is a basic guide to these remaining areas: Great Meadows/Long Beach, the Housatonic River, Pecks Mill Pond, Roosevelt Forest and Far Mill River. We should be proud and protective of these areas as such diverse biological communities in one town are rare. These areas link us to nature and our past; and they are available to everyone to enjoy and study.

Just remember, we are the custodians of our land, not the owners. There will always be people after us that will praise us or curse us for what we left them. In 1854, a great American Indian, named Chief Seattle said this: "Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself." Stratford, indeed all communities should be guided by these words.

George Fredenburgh

Stratford, CT
April 1990

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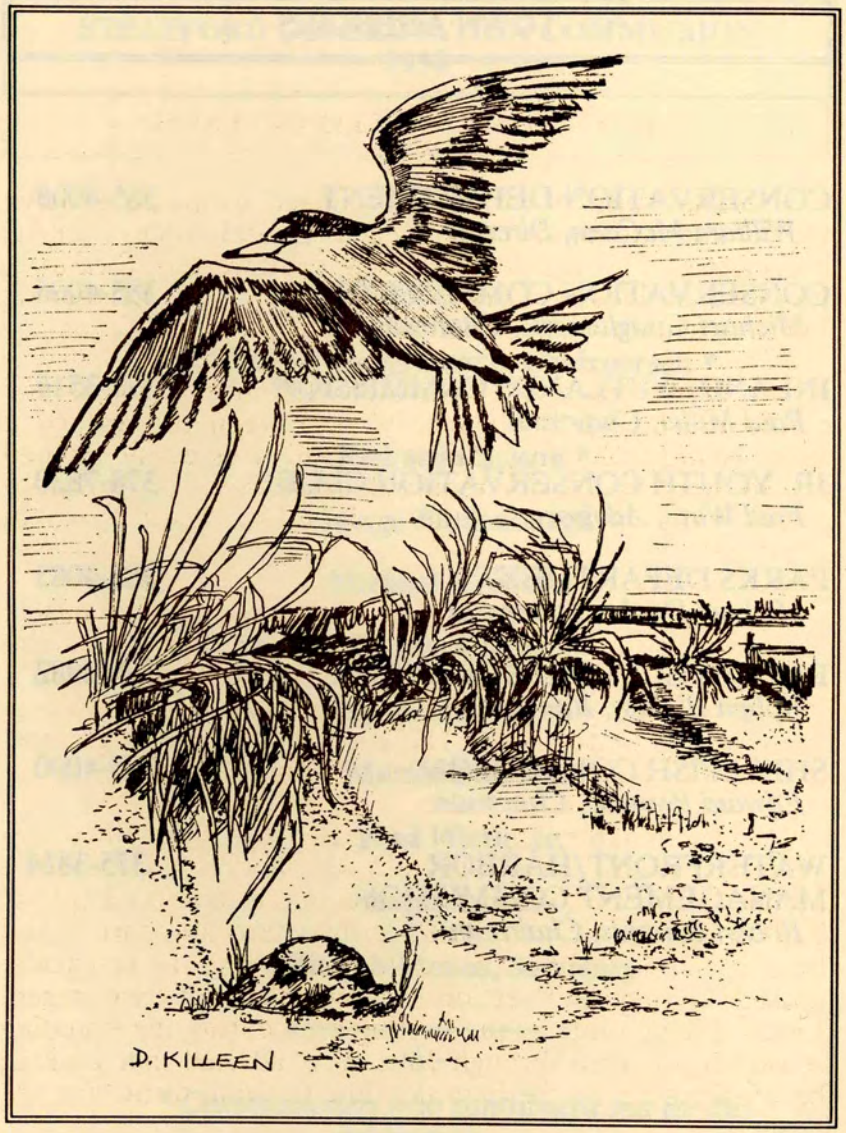

Fig. 1
LEAST TERN FLIES OVER LONG BEACH NESTING AREA.

GREAT MEADOWS / LONG BEACH

The Town of Stratford is indeed fortunate to have the Great Meadows/Long Beach coastal system in its possession. This region, located in southwestern Stratford, just east of Pleasure Beach (Bridgeport), and Bridgeport Harbor, is approximately 610 acres in size.

Long Beach, approximately 1.5 miles long, is the town's coastal barrier beach, lying between the waters of Long Island Sound and the Lewis Gut. It is easily reached by car (parking permit required from May 31st to Labor Day), and is located at the end of Oak Bluff Road in Lordship.

Long Beach is considered an "unimproved" beach; that is, there are not food concessions or permanent restroom facilities. The eastern end of Long Beach is designated as a public beach area and is used for bathing, sailboarding, and fishing. This area is used by the greatest number of citizens, especially in the summer months.

The middle section of Long Beach is maintained as a shorebird nesting area. This bird sanctuary is considered to be one of the best nesting habitats in the state for **PIPING PLOVERS** and **LEAST TERNS**, two rare and threatened bird species. Although active public use is restricted, passage through this section is allowed but not encouraged. Local fencing protects the nesting area during the breeding season from April through July. It is advised that walking be confined below the high-tide line to avoid disturbing the nests.

The western section of Long Beach is occupied by 43 summer cottages. Since the Town owns the entire beach, the land is leased to the cottage owners.

The Great Meadows Salt Marsh is connected to the "back-side" of Long Beach by Lewis Gut, a body of water fed from several freshwater creeks and the waters of Long Island Sound through Bridgeport harbor. The Gut is a great area for canoeing or sailboarding. The barrier beach protects the Lewis Gut embayment from the wave action associated with Long Island Sound and has long been used as a seed area by local shellfishermen. The Gut was connected to the Housatonic River by Neck Creek, until the 20th Century.

The Great Meadows is an extensive tidal marsh ecosystem, behind and protected by Long Beach. Though it once occupied a much larger area, the Great Meadows still provides critical habitat for a diversity of fish and wildlife species. Approximately 250 species of birds can be seen at different times of the year and the area has been described by Roger Tory Peterson as one of the best coastal bird habitats in the states.

Plant Communities

There are four general natural habitats on Long Beach, namely: beach, sand dunes, sandflats and tidal wetlands. Each habitat has special plant types associated with it.

On the highest elevations of the backshore of the beach and seaward of the dunes, grows the beach community; composed entirely of annual plants. The combination of flooding and erosion on the beach prevents perennial plants from establishing hold and affects the location and density of the plants yearly. The principal plants in this zone include:

Pigweed
Common Saltwort
Russian Thistle
Sandbur

Sand dune ridges support vegetation dominated by grasses. **AMERICAN BEACH GRASS** is the dominant plant in this grassland community and covers extensive areas of often pure colonies. Beach grass is the premier plant in this community because of its unique adaptation to burial by sand. Its root system, called a rhizome, is capable of extensive lateral growth, allowing it to rapidly colonize dune areas. The other principal plants in this zone include:

Seaside Goldenrod
Evening Primrose
Wild Lettuce

Sandflat communities are a rare occurrence in Connecticut. This unique resource of Long Beach is primarily a result of the breakwater at Pleasure Beach. Unlike sand dunes which are shifting sands, the sandflats are an undulating area of stable sands. There are a number of rare plants that grow here. Details of these are not generally released to protect them from being "collected" by overactive gardeners and botanists. The principal plants in this zone include:

Wormwood
Purple Love-Grass
Gray's Umbrella Sedge
Poison Ivy

The tidal wetlands community is overwhelmingly dominated by SALT-WATER CORD GRASS (Spartina). Other principal plants in this zone include:

Sea Blite
Dwarf Glasswort
Sea Lavender
Salt-Marsh Aster

Marine Resources

Offshore of Long Beach, in Long Island Sound, are approximately 3,000 acres of State owned Natural Shellfish beds, plus numerous leased grounds. These beds provide extensive habitat for the culture of Oyster seed used for planting stock by commercial shellfishermen. But sewage related pollution is the leading cause of the closure of both Lewis Gut and the natural shellfish beds for direct human consumption in the Long Beach area.

Recreational fishing is done both in the Sound and Lewis Gut, with the most popular species being Winter Flounder, Bluefish and Blackfish. Some common species found in this region include:

Butterfish
Cunner
American Eel
Mackerel
Pipefish
Rainbow Smelt
Sticklebacks
White Perch

(See the Housatonic River section of this publication to a more detailed description of the fish types and life cycles.)

Avian Resources

Historically, Great Meadows totaled as much as five square miles in area, which helped it become a mecca for bird life, that until the 20th Century was more diverse than any Connecticut site. Although greatly reduced in size, it still offers remarkably diverse habitats and species. The area north and west of Lewis Gut contains the only unditched high marsh left in the state. It encourages transient shorebirds and waterfowl to breed and feed.

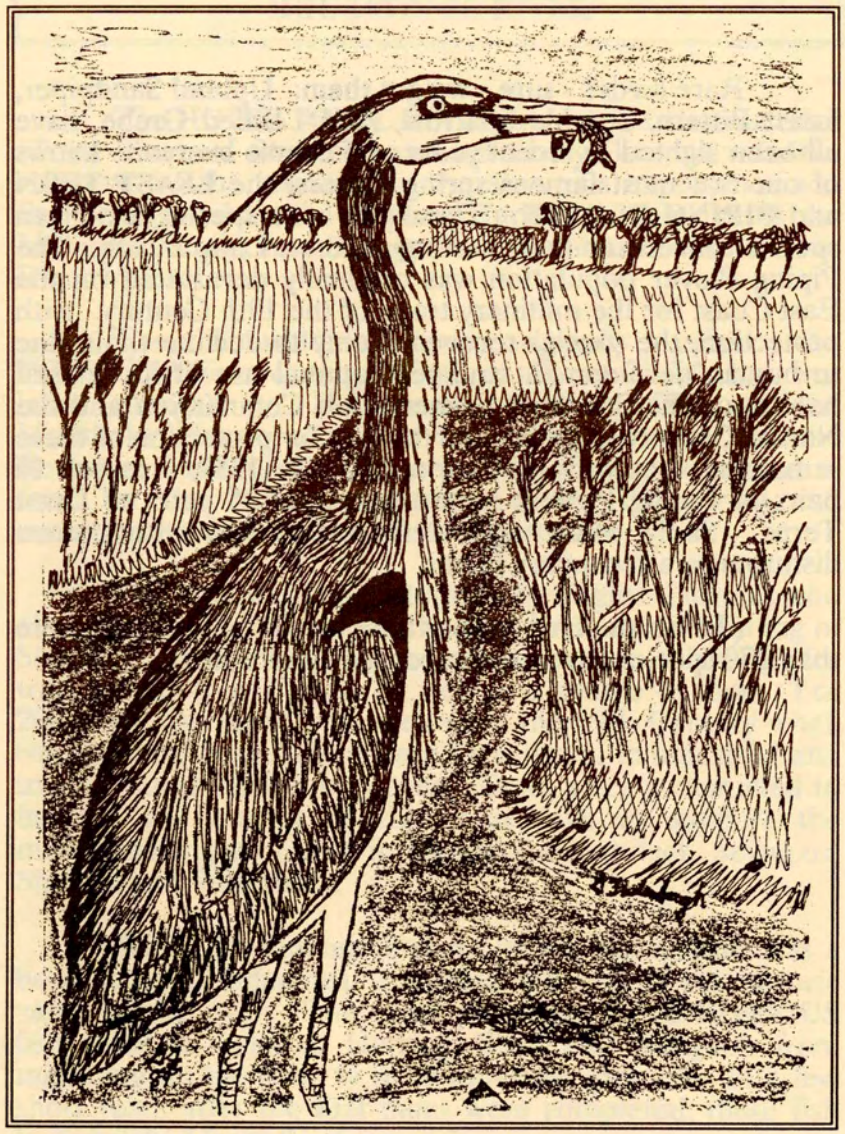

Fig. 2
GREAT BLUE HERON FEEDS AT GREAT MEADOWS.

Rare birds? - sure - we got them: Upland Sandpiper, Least Bittern, Seaside Sparrow, Pied - Billed Grebe, have all been sighted in recent years. Of course everyone knows of our two most famous spring visitors, the **LEAST TERN** and **PIPING PLOVER**. These two rare species are given special concern or their nesting sited on Long Beach. The Piping Plover population was originally devastated on the East Coast for the millinery trade of the 19th Century. with protection, the species recovered only to decline again due to human development and recreational use of it's coastal habitats. The Stratford Conservation Commission and the Nature Conservancy have led the way for protection of these remaining sites with positive results. In 1989, a record 10 pairs of Piping Plovers nested here and 35 pairs of Least Terns. Sadly, many eggs were lost to rats with human disturbance a secondary factor.

(To list the bird species here would be futile, as more than 270 species have been recorded since 1900!)

HOUSATONIC RIVER

The **HOUSATONIC RIVER** frames the Eastern edge of the Town of Stratford and has always been a valuable resource for the residents of the area. Its importance was first recognized by the Cupheag Indians, a subtribe of the Mohegan family, from the great Algonquins of the Hudson River Valley.

The Housatonic was originally called the **POOTATUCK**, meaning "River of Great Falls", but was later changed to Housatonic, meaning "Beyond the Mountain Place", after an Indian village west of the Berkshire Mountains. The river was a valuable source of food for the Indians, especially during the spring and summer when fish and clams were harvested.

The area was later colonized by English Puritans who also recognized the value of the river. After the founding of Stratford in 1639, it served as the main highway for transportation and trade, as well as a source of food. For 200 years this trend prevailed until the 19th Century when the economy base shifted from agricultural to industrial and inland transportation improved. Dams were constructed to harness the energy of the great falls to support the manufacturing processes in Danbury, Naugatuck, Seymour, Shelton and Waterbury.

While the buildup of dams on the Housatonic was a boon to local industries, it marked the end of the historic value of the river. The dams prevented **ANADROMOUS** fish, such as Salmon, Herring, Shad and Sturgeon from migrating up the river to their spawning grounds. In a few short years after the first dams were completed, these fish had vanished from the river.

The river also became a dumping ground for the wastes of the new industries, much of which has been proven toxic in recent years. By the early 1900's the effects of the wastes became visually evident, as the once great Stratford Oyster Industry, also began to decline.
(Note: Oysters from the Housatonic originally reached a foot in length!)

Modern day problems that plague the River and Long Island Sound are a culmination of a variety of factors and sources. Today, Federal and State regulations are assisting in the river's comeback by forcing better treatment of industrial and domestic waste along the river and its tributaries. But the improvement of the river is still impeded by diverse situations, such as:

* dredging in the river, which can reintroduce into the rivers food chain toxic substances that are chemically bound to bottom sediments

* uniformed citizens dumping oil and antifreeze into storm drains, instead of disposing of them properly at a collection center

* liberal use of pesticides, herbicides, and overfertilization of lawns, impacting on the food web - contributing to the blooms of algae on the water, lowering its oxygen levels and life support capability

* illegal hookups of stormdrains, gutters and sump pumps to the wastewater system, causing overflows during rainy periods that result in beach and shellfish bed closings

* overdevelopment in the watershed system, amplifying all the above situations

Clearly, there is a lot that can be done to improve the Housatonic River system, by individuals, by industry and by legislation.

The Housatonic River now serves as a base for a number of boat clubs and marinas that utilize it for its access to Long Island Sound and its fisheries, and also as a recreation base for shore fisherman, waterfowl hunters and water skiers. Following is a brief description of some modern day resources of the Housatonic river and the means of accessing them.

ISLANDS

There are four major islands on the Stratford side of the Housatonic River and are located North of the I-95 bridge. The largest is **CARTING ISLAND**, followed in decreasing order by **POPE'S FLAT, LONG ISLAND** and **PEACOCK ISLAND.** Below the Washington (Route 1) Bridge is another series of smaller islands, dominated by **GOOSE ISLAND.** All of the islands tend to be very productive areas for many forms of river dependent organisms, due to the large interface between the land and river, and the seclusion from human interference.

The vegetation consists mainly of Spartina, Wild Rice, and Phragmites. The Detritis formed from these plants is one of the first links in the food web of Long Island Sound. The islands also serve as breeding grounds for waterfowl, aquatic mammals and many species of birds, and the protective channels serve as nurseries for fish and shellfish. The low elevation of the island allows for periodic flushing with river water during flood tides and coastal storms.

RECREATION AREAS

Bond's Dock

Bond's Dock is located on Shore Road, North of Mac's harbor, which was the original landing site of the Puritan Settlers of Stratford. The dock was named for John Bond, who had a boxer's training quarters here, where such