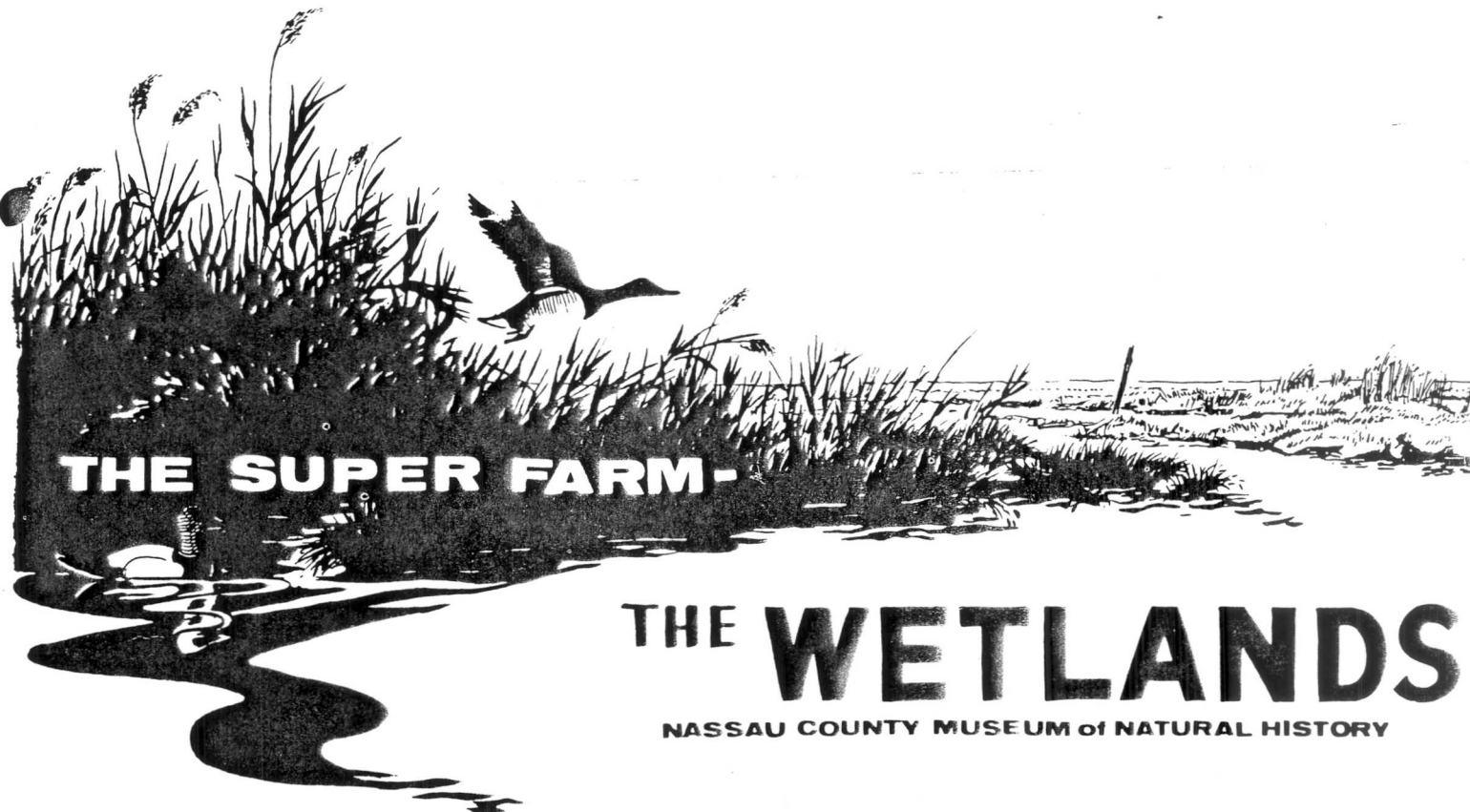


A black and white illustration of a wetland landscape. In the foreground, there is a body of water with a small, dark, irregular shape that looks like a shadow or a small island. To the left, there is a large, dark, irregular shape representing a patch of land or a bank. On this bank, there is a dense cluster of tall grasses or reeds. A bird is shown in flight, emerging from the grasses. The background is a light, open area representing a wetland or marsh.

THE SUPER FARM-

THE WETLANDS

NASSAU COUNTY MUSEUM OF NATURAL HISTORY

THE SUPER FARM- THE WET-

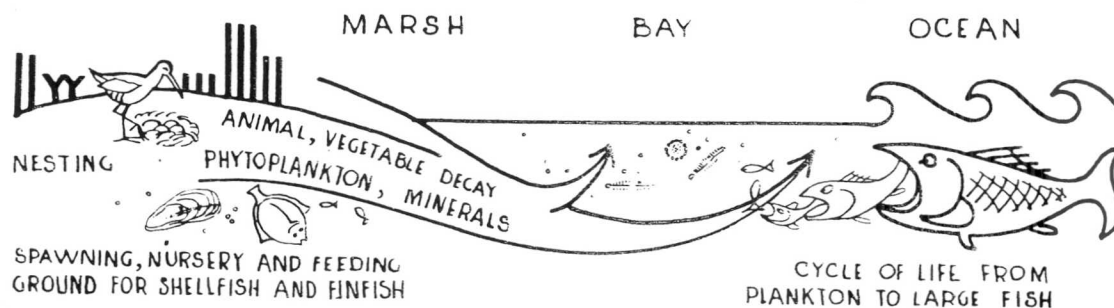
A salt marsh is slimy, muddy, and treeless; its water is unfit for man to drink; in warm weather insects swarm through the grasses like a plague; it cannot be plowed nor navigated easily in a boat. Yet we can say that Nassau County is fortunate to have on its south shore some of the largest salt marshes in this part of the country.

Too often in the past men have looked at the salt marsh and seen a great desert, a barrier between them and the open sea, land unfit to build on or cultivate, nothing but inedible plants, mud and brackish water. They approve of filling in the marshes for housing development or dumping poisonous industrial waste and sewage. People who see the salt marshes in this way are mistaken. They see with only their eyes. The scientist who measures soil fertility and collects plant and animal specimens knows that a salt marsh is one of the most naturally fertile areas of the world. The average wheatfield can produce one and a half tons per acre including straw and roots.

A salt marsh may produce close to ten tons of plants per year. The great fertility of the salt marsh is a result of nutrients trapped in the mud by the meeting of fresh and salt water. Also important is the small black horse mussel. When the mussel filters water, seeking food, it drops a great deal of good fertilizer in the mud. This material is used by algae and eaten by small crabs. The algae and crabs are then eaten by larger animals. So because of the common, seemingly useless horse mussel, many kinds of life find the salt marsh an ideal place to live.

The marsh, unlike the wheatfield, is not a one crop area. Winding through the acres of level green marsh grass are small creeks, and here and there are ponds or potholes like moth holes in a big wool blanket. On the mud bottom and on creek banks grows a thin film of algae. This is what gives the mud its greenish or golden color. Such a small amount of plant life hardly seems

Interdependence of marsh life.



LANDS

important, but we must realize that it is constantly being eaten or washed into deeper water. As some alga disappears more take its place. This process goes on year round. The mud alga does not die in winter. It is not surprising then that one pound of this algae may produce as much food as several pounds of grass. A gallon of milk looks like much more than a teaspoon, but a teaspoon refilled millions of times is much more than a gallon.

As if this were not enough, the salt marsh has yet another means of producing food--phytoplankton, masses of small plants which drift in the relatively still marsh waters.

So you go to a salt marsh and you think of all that productivity, but you may still ask, "What good is it?" In the same way that dry land farms produce corn and hay for animals, the salt marsh produces important food for many wild animals. It serves as an incubator for bluefish, eels, weakfish, hard and soft clams, oysters, scallops, shrimps and bait fish. Its grasses and calm water provide an important resting and refueling stop for migratory birds. Long Island's marshes lie on one of the four major bird migration routes crossing the United States.

Not only does the marsh feed local animals and migrating birds, but streams, current and tides carry its produce out to feed fish miles from shore. Destroy the

marsh and bird migration will be interrupted, shellfish will decline and our supply of fish will dwindle.

Perhaps one reason man often sees the salt marsh as useless land is that he sees no human activity in the marsh--no houses, no parks, no roads--only the occasional hunter. The marsh needs no human help. It plants, harvests and fertilizes itself. Man is an extra and so far he has been able to do little but destroy. It is hard for man to realize he is unnecessary and unwanted. Perhaps the psychological message of the salt marsh is as important as the biological message. It says man is not the center of nature.

A comment from the State Conservation Department on

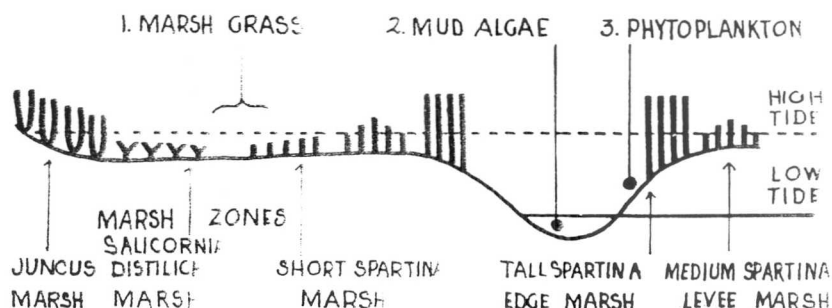
THE DISAPPEARING WETLANDS OF LONG ISLAND

The marine wetlands of Long Island -- much more productive than any cultivated field -- have suffered much at the hands of progress.

From the days of the first Dutch settlers, who built quays on the shores of rural *Bruecklen*, the wetlands have been altered.

Since World War II the rate of destruction has accelerated alarmingly. Our best estimate is that 30% of the salt marshes have disappeared in the past twenty years.

The marshes' fertility is the sum of three production units.



NASSAU COUNTY WETLANDS

Wetlands girdle Long Island. Nassau County's North Shore contains roughly 336 square acres of marshy land, washed by tides. The richest wetlands of Long Island are found along the South Shore of Nassau County, where there are approximately 13,056 square acres of shallow bay water and 9,554 acres of low marshy islands and mudflats. This area forms the total habitat for many species of finfish and shellfish, waterfowl and shorebirds. Some spend their entire lives in the area. Others, like the Atlantic Brant, winter here and migrate to summer breeding grounds on the coast of the Arctic Ocean.

BIRDS

The marshes, tidal shallows and mudflats of Nassau County's South Shore form the most important coastal waterfowl area in the North Atlantic States. These wetlands are vital to the survival of many water and shore birds.

Twenty per cent of the dabbling ducks, 11% of the diving ducks, and 98% of the brant of New York State winter in these marshes. About 5½ million migrating birds use this area between October 1 and April 30.

FISH

The wetlands are the spawning, nursery and feeding ground for many species of shellfish and finfish. More than 60 species use the bay for at least part of the year.

