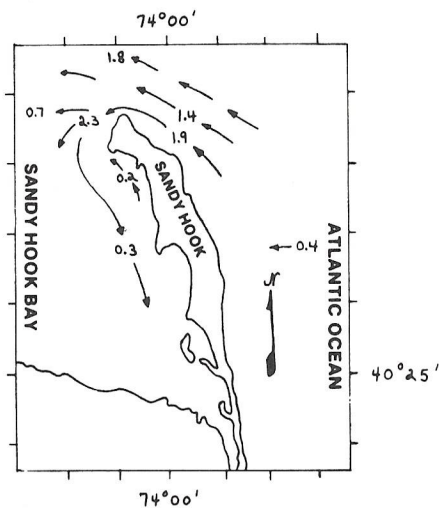
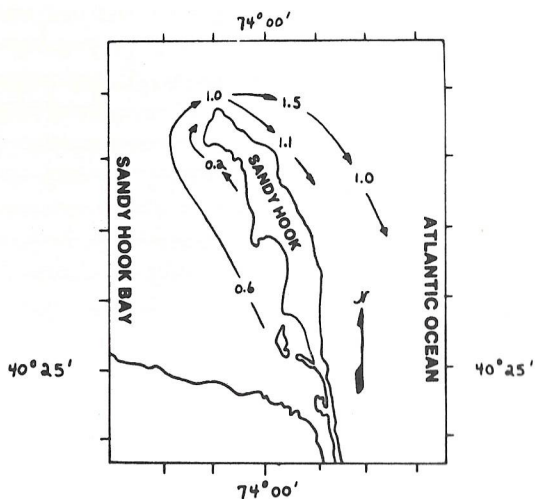


ocean (ebb tide) or in towards the shore (flood tide). Ebb tides occur between high and low tide, with the maximum ebb current greatest one or two hours before low tide. At this point during a tidal cycle, the outgoing flow of water is concentrated in major ebb channels, which are usually bordered by salt marshes or mud flats. Likewise, flood tides occur between low and high tide, reaching a maximum velocity one to three hours before high tide. Maximum current speeds and flow directions for Sandy Hook are illustrated in the accompanying illustrations.



**Current speed and direction in knots.
5 hours after low water. (NOS, 1977).**



**Current speed and direction in knots.
3 hours after high water. (NOS, 1977).**

GREEN SEAWEED

Phylum: Chlorophyta

Green seaweed or algae ranges in size from microscopic to fifteen or more inches in length. There are over 7,000 species of green algae, thirteen percent of which are marine species. Many of these species cannot be properly identified without the aid of a microscope, but most forms found by Sandy Hook beach visitors can be identified quite easily on the basis of size, shape and location.

These seaweeds are grassy green due to a predominance of the green chlorophyll pigment. This pigment is found in all photosynthetic plants, including the brown and red algae species. Green seaweed plants need plenty of light to attain their color, and sometimes may be tinged with yellow, blue, and/or black.

Green algae are an important base in many biological food chains. The species can be safely consumed by humans, and are commonly seen along the Atlantic coast at high intertidal levels or in subtidal shallow waters.

Hollow Green Weed (Link Confetti)

Family: **Ulvaceae**

Enteromorpha intestinalis

Description

Size: 1-2" thick; averages less than 1 foot long, may grow up to 1 yard.

Characteristics: Tubular, intestinal appearance; tubular, sac-like blades contain numerous pockets filled with gas; these blades attach to the bottom by threadlike outgrowths in the base of the plant and when submerged spread gracefully in the water; out of water the blades are flat and matted.

Color: Bright-green to yellow green.

Habitat

Grows singly, in clumps, attached to rocks, shells or wharfs in brackish and salt water; tolerates low salinities and can grow in upper areas of estuaries; also found on mud flats below low tide level, on the bottom of sea-going vessels, and floating in tide pools year round.

Edibility

Fair; a basic food for fish, crabs and invertebrates; eaten as a vegetable in Hawaii, China and the Phillipines.

Sea Lettuce

Family: **Ulvaceae**

Ulva lactuca

Description

Size: Up to 3 feet long.

Characteristics: Blades are membranous and relatively broad. The thallus is ruffled at the edges, resembling a head of leaf lettuce.

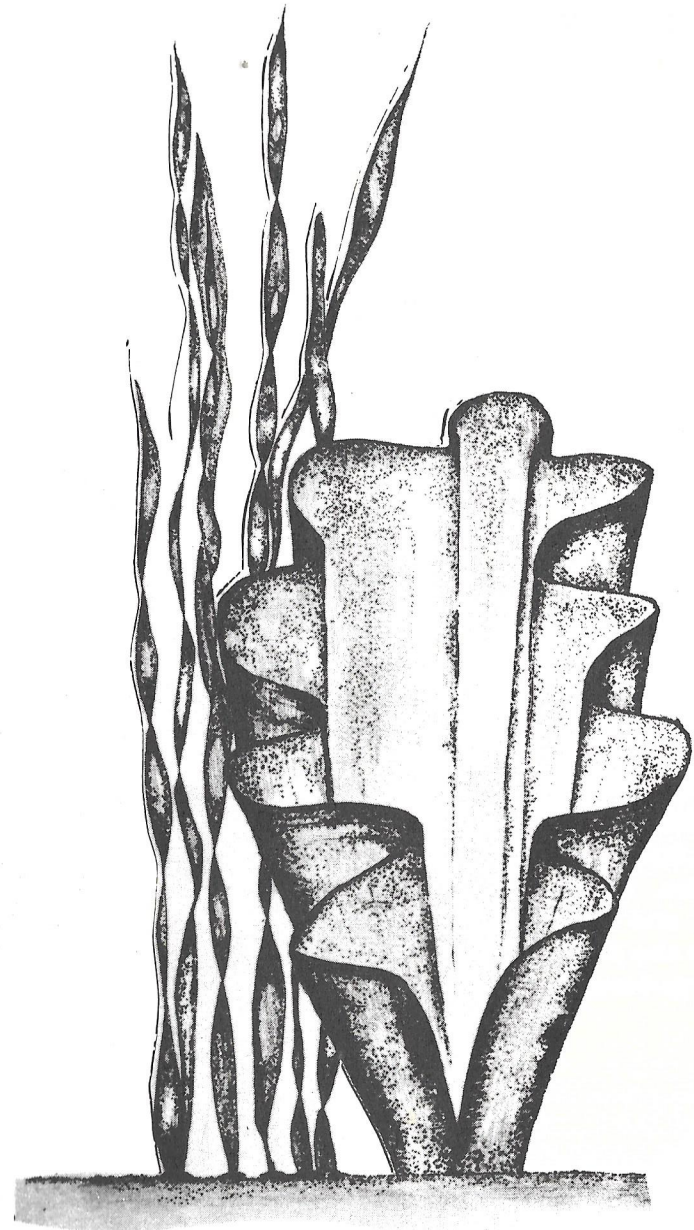
Color: Dark green plant body; thallus is a translucent bright green sheet.

Habitat

Attaches by a holdfast to solid surfaces, but often breaks free and accumulates on muddy bottoms of shallow pools and brackish ponds; has the consistency of opaque waxed paper; can hamper activities of waders and fishermen; drifting fragments and dried, blackened and brittle pieces can be found along the beach; one of the most familiar shallow water seaweeds.

Edibility

Good; provides food and shelter for marine animals.



Hollow Green Weeds

Sea Lettuce