

GUIDE TO MARINE INVADERS IN THE GULF OF MAINE

Codium fragile ssp. *tomentosoides* green fleece, dead man's fingers



Andrew Martinez



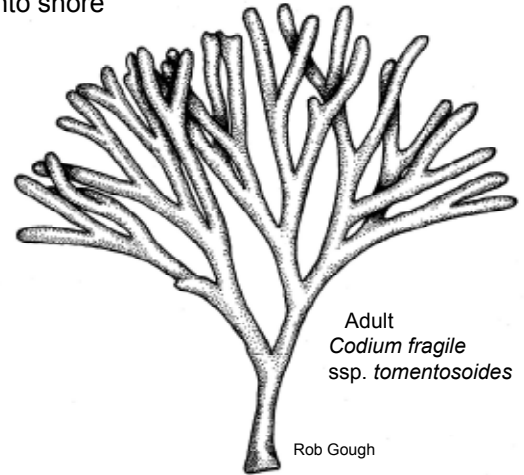
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PHYSICAL DESCRIPTION

- Green, spongy seaweed with cylindrical branches
- Attaches by a broad, sponge-like holdfast
- Upright when small, but droops as it gets larger, up to 36 in (91 cm) in length
- Juvenile stages appear as fuzzy, moss-like mats
- Bleaches white when washed onto shore

HABITAT PREFERENCE

- Attaches to hard surfaces, e.g. rocks, shells, ship hulls
- Inhabits subtidal zone
- May be found in permanent tidepools and in shallow waters along the coastline



Adult
Codium fragile
ssp. *tomentosoides*

Rob Gough

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INVASION STATUS & ECOLOGICAL CONCERNS

This alga is distributed along nearly the entire coastline of the eastern United States. *Codium fragile* ssp. *tomentosoides* is originally from the Pacific Ocean around Japan. After being introduced into New York from Europe in 1957, it now covers a region from the Gulf of St. Lawrence, Canada to North Carolina. It was first documented in the Gulf of Maine in 1964 at Booth Bay, Maine. A dominant species in the subtidal zone, *C. fragile* ssp. *tomentosoides* may radically change subtidal community composition, structure, and function. It attaches to nearly any hard surface, increasing maintenance labor for aquaculturists and reducing the productivity of cultured species. When this species becomes established in shellfish beds, wave energy can lift the alga. As the alga floats away, it carries its host shellfish away from its normal habitat (resulting in another common name for this species, "oyster thief"). The rapid growth of this species and its ability to regenerate from broken fragments assist it in outcompeting native eelgrass and kelp beds, the primary shelter for many finfish and invertebrates. Dense, low-lying *C. fragile* ssp. *tomentosoides* meadows on the seafloor make movement difficult for lobsters, fish, and other organisms. When washed ashore by storms in great abundance, this alga has fouled beaches.

SIMILAR SPECIES

Codium fragile ssp. *tomentosoides* is occasionally mistaken for a sponge. However, there are no native sponges in the northwest Atlantic Ocean with a similar appearance to this alga.

This identification card is one of a series produced by Salem Sound Coastwatch (www.salemsound.org) highlighting introduced species that pose a threat to the marine environments of Massachusetts and the Gulf of Maine. The original development of these cards was funded by the MA EOEEA Office of Coastal Zone Management with funding from the U.S. Fish and Wildlife Service. For additional species information or to report sightings, please visit www.mass.gov/czm/invasives/monitor/reporting.htm.

