

Solitary Tunicates



Betsy Rickards

Ascidiella aspersa
Fluted Sea Squirt

Non-Native



Cristina Kennedy

Styela clava
Club Tunicate

Non-Native



Arjan Gittenberger

Ciona intestinalis
Sea Vase

Non-Native

Identification

- Thin, grayish or pink, semi-translucent tunic with a rough, bumpy surface
- Typically oval or egg-shaped
- Up to 5 inches long
- Oral siphon at the top of the body, atrial siphon located on the side

Distribution

- First reported in New England in the early 1980s
- Found throughout New England and portions of the Canadian Maritimes
- Native to the Northeast Atlantic

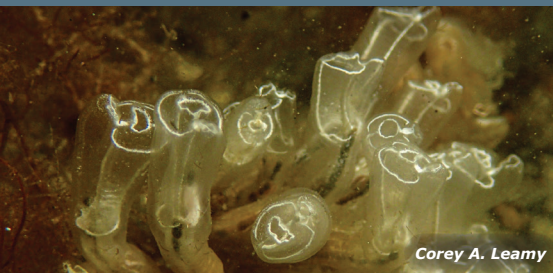
- Brownish, mottled color with leathery and warty tunic
- Long, club-shaped body up to 8 inches long with a narrow stalk about $\frac{1}{3}$ of total length
- Both siphons at the top of the body
- Alternating stripes on inside of siphons

- First reported in New England in the early 1970s
- Found throughout New England and the Canadian Maritimes
- Native to the Northwest Pacific

- Transparent tunic with variable color (white, orange, light pink, or light yellow)
- Soft, smooth texture
- Body collapses when taken out of the water
- Up to 6 inches long
- Siphons are ringed in yellow

- Previously considered cryptogenic in the region, but recent evidence suggests the species is native to Europe and was introduced to the Northwest Atlantic
- Found throughout New England and the Canadian Maritimes

Solitary Tunicates: Similar Species



Corey A. Leamy

Clavelina lepadiformis

Light Bulb Tunicate

Non-Native

- Transparent body
- White, yellow, or pink bands around the siphons and down the body, giving the species a “light bulb” appearance
- Colonial tunicate with zooids that are joined at the base by short stolons
- Colonies have been reported in Connecticut as early as 2009 and may have been spotted in Boston Harbor in recent years
- Introduced species native to the Northeast Atlantic



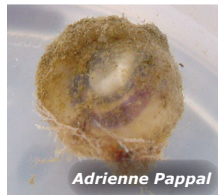
Gretchen Lambert

***Molgula* spp.**

Sea Grape

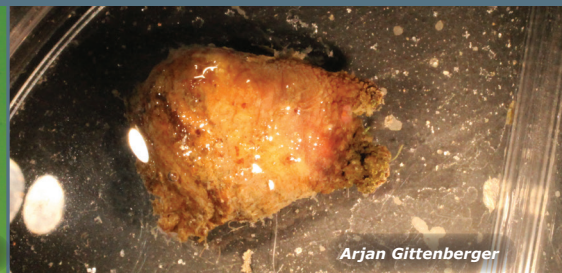
Native and Cryptogenic Species

- Translucent gray or greenish blue
- Up to 1.5 inches wide
- Grape-shaped, siphons close together at top of body
- Often in dense clusters
- Several species occur in the region, including native species (*M. manhattensis* and *M. provisionalis*) and cryptogenic species (*M. citrina*)



Adrienne Pappal

Molgula spp. are often covered with a fine layer of sediment.



Arjan Gittenberger

Styela canopus

Rough Tunicate

Non-Native

- Tunic is reddish brown and rough or warty, often covered with fine debris
- Typically about 1 inch long
- Lacks a long stalk
- Attaches to surfaces in sheltered areas
- Introduced species native to the Indo-West Pacific
- Can be found throughout the Northwest Atlantic, but more common in warmer waters