

## GUIDE TO MARINE INVADERS IN RI COASTAL WATERS

# *Ostrea edulis*

## European flat oyster



Salem Sound Coastwacht

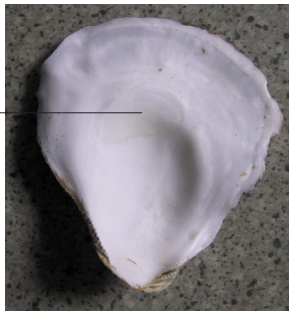


Salem Sound Coastwacht

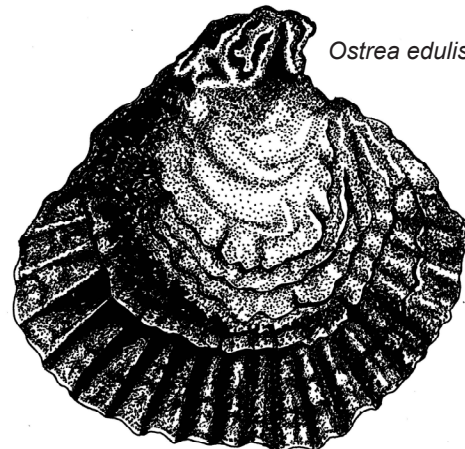
### PHYSICAL DESCRIPTION

- Shell slightly scalloped and usually rounder than native oyster, *Crassostrea virginica*
- Flat, grayish-white shell, typically with a white muscle scar on internal surface
- Grows up to 8 in (20 cm) in length

white  
muscle scar



Salem Sound Coastwacht



*Ostrea edulis*

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### HABITAT PREFERENCE

- Estuarine, intertidal to subtidal
- Found on hard, stable surfaces or structures from the low water line to depths of 30 feet ( 9.2 m)
- Observed in muddy areas attached to debris or any available hard surface
- Does not appear to overlap with native oysters, but occasionally is found with blue mussels

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### INVASION STATUS & ECOLOGICAL CONCERNS

Introduced from Europe where it occurs from Norway to Morocco and into the Mediterranean and Black seas, *Ostrea edulis* has been cultivated in the United States in the Pacific Northwest and northern New England. The European oyster was imported to Maine in the 1950s for aquaculture. It is believed to have escaped from the former Salem Harbor marine aquaculture facility in Massachusetts during the 1980s. A 1997 survey revealed dense concentrations of *O. edulis* in Salem Harbor, Danvers River, and Manchester Bay (Salem Sound), Massachusetts. Lower densities were observed north to Cape Ann and south to Boston Harbor. *O. edulis* continue to be harvested in Casco Bay, Maine, while all shellfish harvesting for human consumption is prohibited in Salem Sound. In the Northeast, *O. edulis* appears to occupy a different niche than the native oyster population, and it is yet to be determined if there are ecological impacts. There is ecological concern over *O. edulis* hosting a parasite (*Bonamia ostreae*) that infects and kills oysters. Although this parasite does not appear to affect *Crassostrea virginica*, there is concern that the parasite might eventually “jump” over to this native species.

### SIMILAR SPECIES

#### *Crassostrea virginica* - NATIVE

Common, Eastern, Atlantic, or Virginia oyster;  
Native commercial oyster found from  
the Gulf of St. Lawrence to the West Indies,  
including the northern Gulf of Mexico.

- Grayish, rough, elongated shell
- Highly variable shape and wavy margins
- Narrow at hinge, gradually widens
- Typically has a purple muscle scar
- Grows up to 10 in (25 cm) in length

*Crassostrea virginica*



Salem Sound Coastwatch

This card is adapted from an original series produced by Salem Sound Coastwatch ([www.salemsound.org](http://www.salemsound.org)). The original series was funded by the MA EOEAA Office of Coastal Zone Management with funding from the U.S.F.W.S. For more information please visit [www.mass.gov/czm/invasives/monitor/reporting.htm](http://www.mass.gov/czm/invasives/monitor/reporting.htm). The production of this adapted card was funded by the RI Coastal Resources Management Council with funding from the U.S. Fish & Wildlife Service. To report findings please email [kcute@crmc.ri.gov](mailto:kcute@crmc.ri.gov) or call (401) 783-7772 or (401) 783-3370.