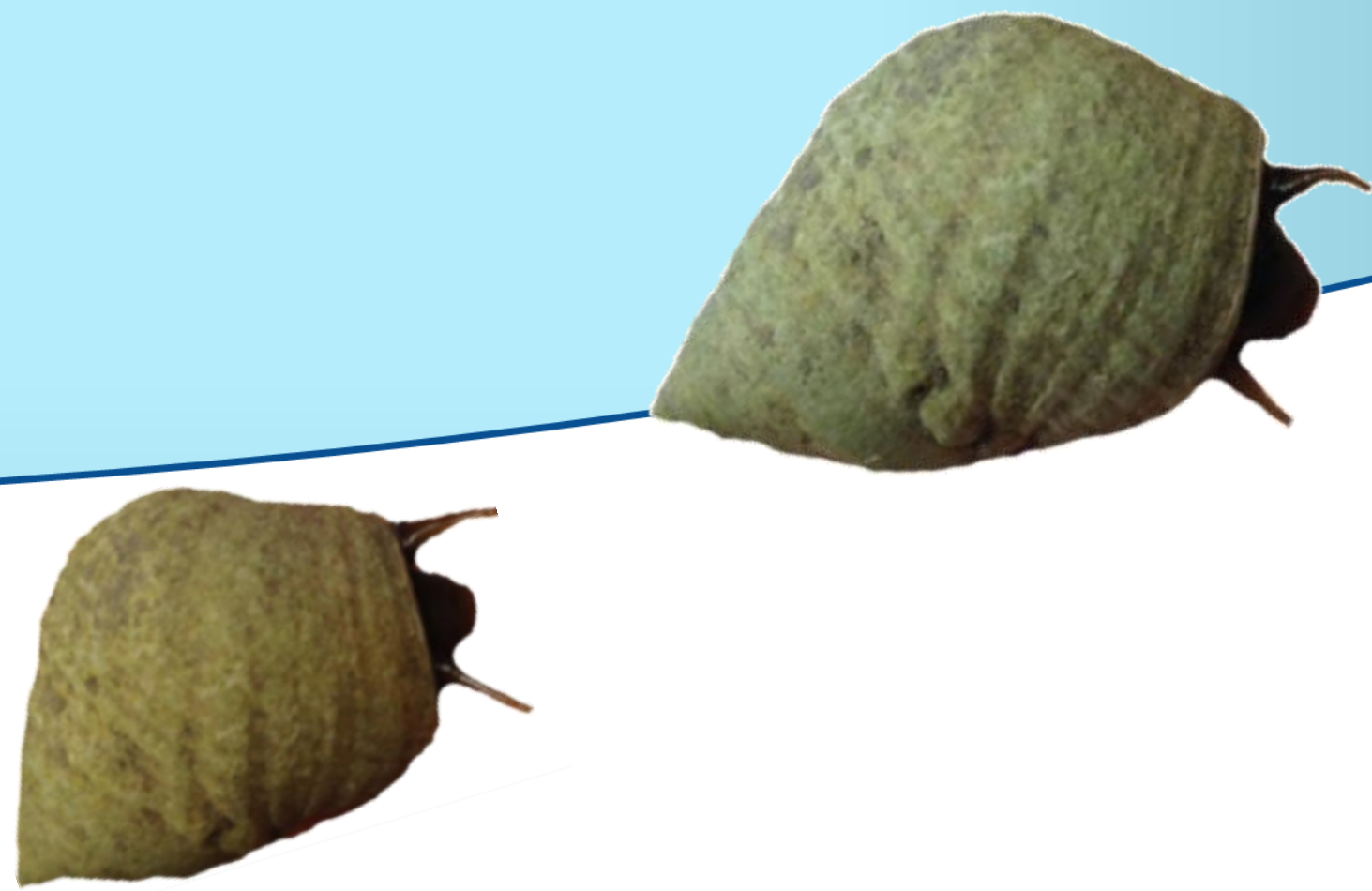


# MARSH PERIWINKLE SNAIL

*Littoraria irrorata*



**Periwinkles and the Marsh:** These snails are considered an indicator species in salt marsh ecology. Periwinkles are very sensitive to chemicals and pesticides so they are used in toxicology studies. Scientists use periwinkles to help examine the health of marshes. They help find what is being put in the marsh from run-off and other human induced effects that can cause harm to the organisms that live there.

**Fun Facts:** Periwinkle snails only grow to be about an inch long. They can go without food or water for many days by retaining water in their gills. These snails also secrete a mucous in order to hang on to the stalks of smooth cordgrass.

**Student Research at LUMCON:** Students who have participated in LUMCON Estuarine Awareness and Discovery (LEAD) Camp and Field Marine Science Camp have been conducting periwinkle mark-recapture studies. The bottom picture shows students counting tagged versus untagged snails in a quadrat along a transect. Students are trying to understand distribution, site fidelity, and population counts of these snails in LUMCON's marshes.

**Habitat:** Periwinkles spend most of their time on the shoots of marsh smooth cordgrass (*Spartina alterniflora*) and in salt marshes.

**Food Sources:** Mostly algae, but also dead plants and small animals.

**Behavior:** They have an internal clock that is timed with the tides. During low tides they will move down the stalks of grass to feed. When it is high tide the snails will climb up to the tops of the grass to keep away from predators like the blue crab and redfish.

**Am I from here?** Periwinkle snails are not actually native to the United States. They were brought over in ship ballast water from Europe in the 1800's. Periwinkles are considered a delicacy in many European countries and are commercially harvested.

## References:

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