

Nature Notes

...from Sharon

The Lettered Olive is a Gastropod of the *Oliva* genera and is one of about 25 species found in North America. There are over 300 species world-wide in tropical and temperate waters. They can get up to 2 ¾ inches long. Females release eggs in transparent, round capsules that may float in the water for about a week before the young hatch. Each capsule contains 20-50 eggs. For the first part of their lives, the young are free swimming in a planktonic stage before developing shells and settling to the bottom to become adults.

Lettered Olive (*Oliva sayana*)



The Lettered Olive has a beautiful cylindrical shell that is very smooth and glossy, with a small, pointed, conical spire at the end. The smooth exterior is generated in a living sea snail (mollusk) by its mantle and extension of the foot that covers the exterior of the shell much of the time. Its base color varies from pale yellow to grey, with fine, irregular zig-zag reddish-brown markings. The markings are where the Lettered Olive gets its common name, because it looks like someone tried to write on its shell. It has two indistinct dark bands. The mollusk (snail) only has one shell during its life and just adds on as its needs grow. Its aperture is very narrow and runs almost the length of the shell. At the base, it has a siphonal notch, where its head and siphon protrude. If you pick up a live shell, the snail will fully withdraw into its shell.

For me, October is for olives—Lettered Olives, that is! This is when I've notice the most live olives along the beach at low tide. They are not out in the open—you have to look for them. It is sometimes detected at very low tide by the trail it leaves when crawling below the surface on semi-exposed sand flats. Walk along the beach and look for something that looks like someone marked in the sand with a stick. Sometimes is goes in circles, other times it may look like a “J” or perhaps a smiley face—they are very creative with their art work. If you happen to see visitors picking up **live** shells, please educate them about the shells and let them know they should not take live shells from the beach. That's the law!



The lettered olive does not have an operculum (hard covering) on its foot like some gastropods. Its powerful foot can quickly burrow into sand or grasp prey. This nocturnal predator is a carnivore, feeding on bi-valves (especially coquina shells) or crustaceans (such as sand crabs) by enveloping their prey with the hind part of their foot and pulling it under the sand. They have a radula consisting of tiny hard teeth, resembling a miniature file on a flexible ribbon. It uses the radula to drill a hole into the shell of its prey, then secretes digestive juices into its prey to start breaking down the meal for easy digestion. As it moves through the sand, you might be able to see the long siphon of this animal, which allows it to breathe and sniff from far under the sand where it buries itself during low tide. It does have eyes; however, eyesight is very poor and it depends on sense of smell to find its food. Which way does it move? Away from the pointed end—its head is at the open notch!



Long ago native Americans made necklaces of the beautiful shells, as well as decorated clothing. In the early 1900s these shells were collected and strung to make door-curtains to sell to tourists. I believe I saw these door-curtains in a tourist shop in the keys a few weeks ago!