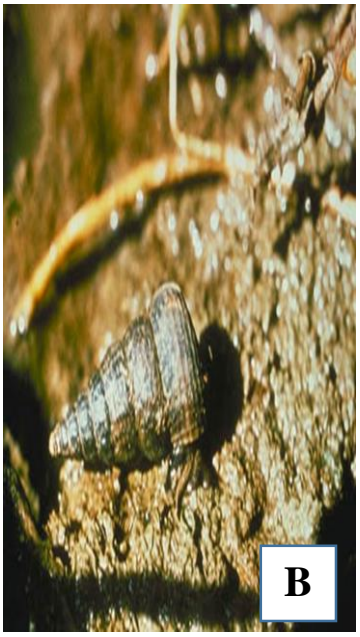

Macrofauna:

Epifauna and Infauna

The organisms that live at the bottom of a wetland are known as benthos. Clams, worms, oysters and mussels are examples of benthic organisms.

There are two groups of benthic organisms, based on their habitat: epifauna and infauna.

Epifauna live attached to a surface and infauna live and burrow in the sediments beneath the surface within a wetland.

Benthos play several important roles in the food web. Benthic organisms are also an excellent indicator of environmental conditions in wetlands.

Benthos link the primary producers (phytoplankton) with higher levels in the food web. Filter feeders such as clams and oysters consume plankton and organic particles. Many benthic creatures, particularly clams and worms, serve as food for larger, economically important species such as crabs and fish.

In the Huntington Beach wetlands, the epifauna sampled consist primarily of *Melampus olivaceus*, Salt Marsh Snail (Image A), and *Cerithidea californica*, CA Horn Snail (Image B). The Salt marsh snail grazes on microalgae and are great contributors to the decomposition and detrital cycling of the marsh system (Whitcraft, 2007). The CA Horn snail eats primarily diatoms.

Infauna organisms (6 Images of C) consist primarily of worms, nematodes, clams, isopods, and larvae. Insects, like those that are terrestrial, are herbivorous and crustaceans, like crabs, are predaceous; whereas worms are detritivores/decomposers that break down organic matter (from algae, plants, and animals) and waste over time.

Within a stable and productive ecosystem, both epifauna and infauna benthic organism will be present allowing for the cycling of nutrients and contribution to a dynamic and intricate food web.