Crawfish...AND THEIR CHIMNEYS

There are many species of crawfish in Louisiana. Some are small, others are large. Some are rather drab in life, while some species are ornately colored with blues, reds, yellows, and greens.

Only a few species occur in our coastal wetlands; all are restricted to freshwater. Our most common species burrow during the late summer, spend most of the fall and winter underground in water filled tunnels, then move to open water (anything from roadside ditches to swamps, ponds, bayous, and lakes).

First, are crawfish important in the grand scheme of things? Mais, yeah! They are a wonderful part of our cuisine, thus they are an important part of our economy. They provide many jobs (from catching and selling to processing to selling back to customers like us to serving in restaurants and shipping around the nation). What would the world be like with no boiled crawfish or etouffee? I wouldn't want to know!

Other than eating and selling, what is the value of crawfish in nature? For one, they burrow much of the year and aerate soils that may otherwise have depleted oxygen. Crawfish are detritivores. That is, they break down organic material such as leaves and other plant parts (but they also eat living plants and animals such as worms, insects, etc.). All day long, they sit around munching on leaves. The benefit is that if we didn’t have things like crawfish doing this, we would soon have leaves and other organic material stacked up well over our heads. While they are munching on leaves, crawfish are also consuming zillions of microbes, thus ingesting microbial protein. This being a crawfish’s main source of protein, next time you consume crawfish tails, just say to your friend, “This is the best processed microbial protein I’ve ever tasted,” because that is basically what you are eating – though it has been transformed into a crawfish.

What kind of crawfish do we have in the Lake Pontchartrain Basin? We have two commercial species: Red Swamp Crawfish (Procambarus clarkii) and White River Crawfish (Procambarus acutus). Before you get confused, they both look red when cooked with good seasoning. The easiest way to tell them apart is that in the Red Swamp Crawfish, the pinchers are heavy and thick; the White River Crawfish have at least one long and slender pincher. In general, Reds are found in swamps, bayous, and ditches, and Whites are more in large, deeper, usually flowing bodies of water such as lakes associated with rivers. However, the species may be found living together. Usually, the average sack of crawfish will have mostly Reds and a few Whites.

What are crawfish chimneys? Crawfish chimneys are those “smokestacks” – looking things that appear in ditches, fields, and our yards each spring. Everywhere you see one there is a crawfish living in a burrow underneath. Their tunnels may extend down into the earth 3 ft or more, sometimes being a single burrow going straight down, but more often being a main tunnel with a couple of side tunnels, each with a room at the end. They are normally full of water.

Sometimes one sees that the color and texture of the chimney mud is different at different levels of the chimney. This is a sign that there are different types of soil layers below the surface. As the crawfish burrows down, it brings up soil from different layers and deposits the pellets of mud at the top of the chimney.

How do they make them? No, they don’t have little backhoes or dredges. They actually use their legs and mouth parts to dig up mud and make it into a little ball called a pellet. Each pellet is taken to the surface (the crawfish moves through the burrow looking like a fullback carrying a football) and placed on top of the existing chimney. The next pellet is set beside the first. This continues, much like a brick layer putting bricks on a surface, then making another layer, etc. until a building is totally bricked. The crawfish makes the chimney out of many, many pellets of mud. Take a close look the next time you see a chimney and you will clearly see this neat system.