



## The CRAYFISH TALE

### The RUSTY Crayfish

When I was just a kid I was told that crayfish were fine creatures. 'Noble' was a word often associated with them. Everybody revered the crayfish; at least enough to catch him and stuff him in a boiling pot and eat him. Or her. The official name Carl von Linné gave to the crayfish was *Astacus astacus*, or in common language, the noble crayfish. That was fine with me, and I noticed also that crayfish were even mentioned favorably in the literature of the country.

Then I heard about the rusty crayfish. Now the tables were turned, and most I read about the rusty was pretty negative. Sure, most crayfish have acquired a rather negative reputation in some circles, but the rusty has them all beat.

Crayfish come in two distinct reputation groups; the Natives and the Invaders. Native crayfish, as are most other native species, are usually accepted and in balance with eco-friendly denizens. But not so the invasive and alien imports from other sections of a country.

And for a pretty good reason. While native species have developed a certain balance in their environment, the invaders are often aggressive and full of desire to spread out in their new habitat, often to the detriment of the natives.

Such is the case of the rusty crayfish. It is an invader to many

areas in this country, and they are native only to certain waters akin to the Ohio River. Rusties are native in Ohio, Kentucky, Tennessee, Indiana and Illinois. That's where they have developed a balance in the native eco-system and are usually not associated with any destructive habits.

But in recent years they have spread and currently the rusty crayfish has expanded its range to include Michigan, Missouri, Iowa, Minnesota, New Mexico (this is obviously a human intervention case), New York, New Jersey, Pennsylvania, Wisconsin, and most of the New England States as well as Ontario, Canada.

This is where the problems start. A species in a new area often becomes aggressively invasive and tends to impact the otherwise balanced natives. Rusty crayfish are opportunistic feeders, which means that they will eat most anything available. They will feed on vegetation, worms, clams, insects, other crustaceans, bottom junk, fish eggs and small fish. The rusty crayfish has a vigorous metabolism and can eat twice as much food as native crayfish.

But crayfish are not without their enemies also. Fish such as trout, and bass do prey upon the rusty crayfish. When trying to find out what trout were feeding on in an Arizona lake, I opened the stomach of a caught fish and found to my

surprise several medium sized crayfish in it

#### HOW TO IDENTIFY A RUSTY

Most crayfish look very much alike, at least to the uninitiated eye like mine. With over 300 species of crayfish in this country, no wonder it is difficult to tell them apart. The Signal crayfish of California has its white spot on the claws, the red swamp crawfish (*Procambarus clarkii*) in Louisiana has its reddish shell and the rusty (*Orconctes rusticus*) has a rusty patch on the sides of its shell. Its claws are grayish-green to reddish-brown with dark black bands on the tips. The two rusty patches on either side of the crayfish's body are especially visible after the shell has dried out. The rusty crayfish does not burrow, and will therefore require a constant amount of water to survive.

Crayfish, just like any other species, will eventually spread if the area around them is benevolent to them. But when it comes to crayfish, and especially the rusty, they are often spread with human help. Either they are helped along into new watery elements as bait for bass catching fishermen, or they may be dumped in non-rusty waters by soft hearted aquarium owners or members of biology classes that have completed their biological classes. Being a lively species, they will soon invade their new area and

take advantage of what their new habitat has to offer. Such as native crayfish...

Contrary to most native crayfish species, the rusty crayfish will assume a defensive position with claws raised when threatened by predators. As a result few of the invaders are eaten by predators while the meeker natives may become victimized. Competition for food is another problem for the natives as the invaders often eat the available food and even push out the natives from their favorite hang-outs.

Due to the larger size of the mature rusty crayfish, you'd think that simply encouraging people to catch them more intensely would eventually reduce their numbers. That doesn't seem to work as planned. And as poisoning the rusty would also get rid of the natives, that plan is out.

Preventing the spread of the rusty, or any other invasive species, seems to be next to impossible. As the rusty is more aggressive, just like so many other invading species in our world, including *Homo sapiens*, we will apparently have to accept their spread.

Those of us who enjoy an occasional meal of cooked crayfish may help the situation by simply catching more crayfish and eating them more often. Especially rusties...

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