Rusty crayfish

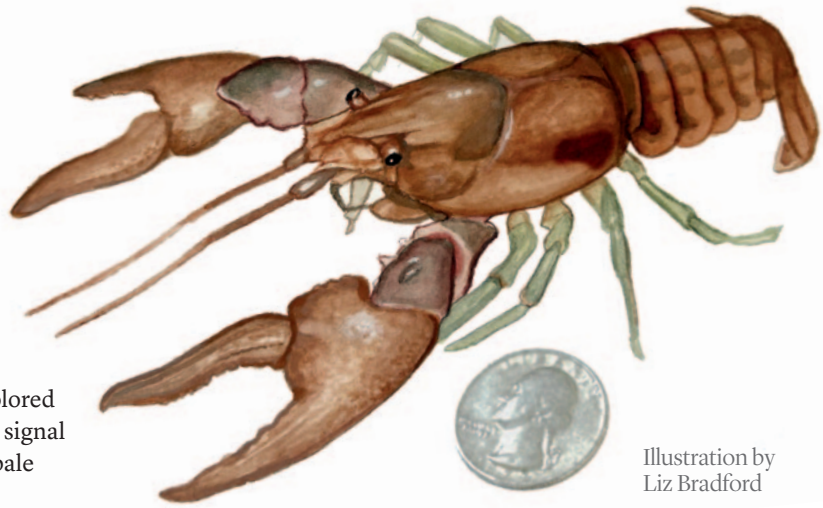

Illustration by Liz Bradford

What it is

The rusty crayfish is a big (up to 6 inches long), aggressive crayfish native to the Ohio River Basin. Though not currently found in Montana, it is spreading west and is now in Wyoming and Colorado.

How to ID it

Though it hasn't been spotted in Montana, anglers and boaters should be on the lookout for a large, rust-colored crayfish nearly as large as a dollar bill, with a pair of rust-colored spots on either side of its hard upper shell. The similar-size signal crayfish, a Montana native species, is bluish-brown with a pale patch near where the claw hinges to the head.

Where it's found

Rusty crayfish have spread from their native range in the Ohio River Basin to several Eastern Seaboard states, and west and north to Wisconsin, Minnesota, Iowa, Wyoming, Colorado, and Oregon.

How it spreads

People inadvertently introduce rusty crayfish by bringing them to new lakes, rivers, or reservoirs as bait, and then illegally emptying their bait buckets into the water. The invasives also spread when people illegally dump aquarium contents into water.

Why we hate it

These aggressive crustaceans crowd out native crayfish. They also eat massive amounts of vegetation, robbing adult fish of nesting areas and small fish of shelter from predators.

How to control it

Rusty crayfish are nearly impossible to eradicate once established. Chemicals aren't an option because they also kill native crayfish. Prevention through monitoring, like at FWP Aquatic Invasive Species check stations, is the best way to keep them out of Montana.

Report suspected sightings at nas.er.usgs.gov/SightingReport.

A quick look at concepts and terms commonly used in fisheries, wildlife, or state parks management.

"Population modeling"

To manage elk, deer, and other wildlife populations effectively, FWP biologists need to understand how and why populations change over time. Because they can't experiment with actual populations, they study "models"—mathematical simulations of wildlife population components such as births, deaths, immigration, and emigration. Using computers and mathematical formulas, wildlife managers experiment with models to figure out whether a population of, let's say mule deer, is rising, falling, or stable (known as the population trend). "Modeling" also helps them predict how factors that drive trends (such as weather, habitat, and predation) will affect population size and makeup—and what management actions would work best to get populations to where they need to be.

For example, if a mule deer population grows too large, wildlife managers use models to determine how many does should be harvested to bring numbers down to the population objective.

Because they are composed of scientific data like yearly harvest survey reports, population models often reduce the uncertainty of potential management outcomes, helping FWP manage mule deer and other wildlife more effectively. ■

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Wildlife managers enter scientific information into mathematical equations that "model" different versions of mule deer and other wildlife populations. This helps FWP figure out, among other things, the best management response when there are too many or too few animals in populations.