

Minnesota CRAYFISH
PHOTO IDENTIFICATION GUIDE
April 2019 version

Adapted from Craig Roesler
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There are four species of crayfish that are of concern in Northern Minnesota. They are:

Calico crayfish (*Faxonius immunitus*)(p.3)

Northern Clearwater crayfish (*Faxonius propinquus*)(p.4)

Rusty crayfish (*Faxonius rusticus*)(p.5)

Virile crayfish (*Faxonius virilis*)(p.6)

The three most commonly found species are the Virile crayfish, the Northern Clearwater crayfish, and the Rusty crayfish. These three species typically comprise more than 90% of specimens in crayfish collections.

This guide is an attempt to allow simplified identification of Minnesota crayfish. Technical terms have been avoided*. “Lobster dinner” terms have been used (tail, claws, shell). Color photos depicting useful identification characteristics are provided. A simplified key is included on page 2.

A crayfish species can be fairly variable in appearance. All identification characteristics will not be apparent in every specimen. This guide should not be depended on when correct identification is critical. However, it is likely to allow correct identification of most species most of the time.

It generally requires the use of live or fresh specimens. Preserved specimens will lose their markings. Specimens also need to be fairly clean, and not coated with mineral deposits or biological films that will obscure markings. Very young specimens or freshly molted specimens also may not exhibit typical markings. Hybridization of *Faxonius* species can occur. Hybrids can have a blend of species characteristics.

This guide will hopefully assist with efforts to monitor non-native, invasive crayfish species. It will also allow the determination of local crayfish species present and increase awareness of the variety of crayfish species we have.

A more in-depth crayfish guide (including some not found in Minnesota) can be found here:

<https://dnr.wi.gov/topic/invasives/documents/CRAYFISH-OF-WISCONSIN-GUIDE.pdf>

* One technical term, “rostrum”, is used. The rostrum is the tapered “shell” section above and between the eyes.

SIMPLIFIED Minnesota CRAYFISH KEY

For medium to large-sized, live or fresh specimens

1. Tuft of fibers present adjacent to claw hinge – ***Faxonius immunis*** p.3

No tuft of fibers present adjacent to claw hinge – 2 Curved Seams

2. Curved seams on back don't touch in middle – 3

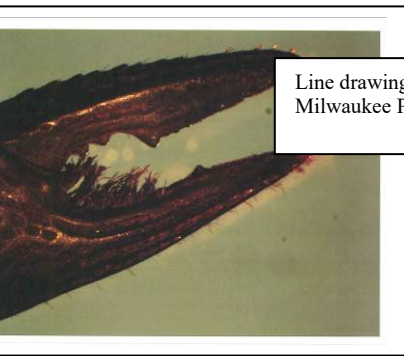
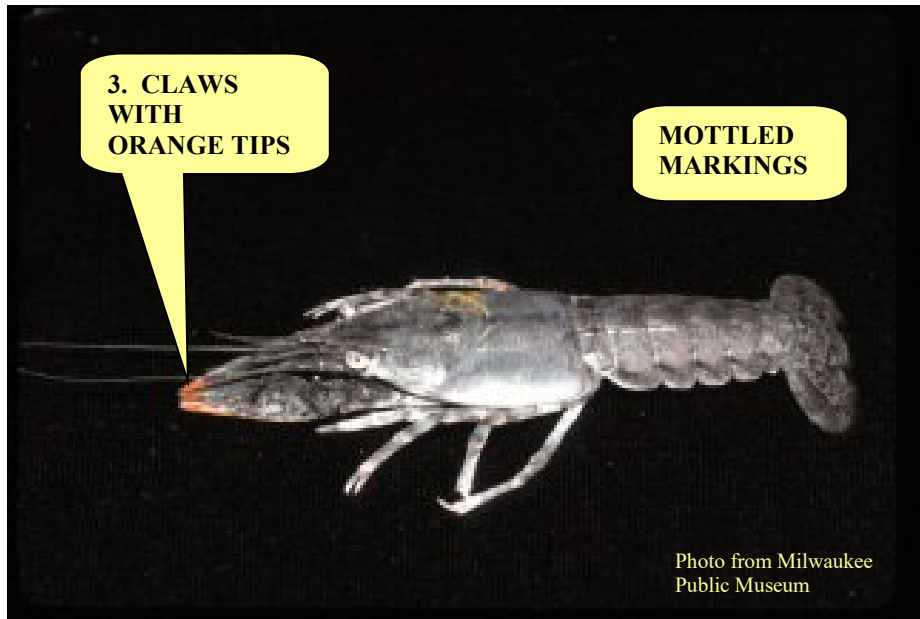
3. Dark band on top of tail – 4

Without dark band on top of tail – 5

4. Sides without numerous small bumps; brown or grey body color; claw tips orange/red with black rings – ***Faxonius propinquus*** p.4

5. Claw tips orange/red without black bands; two to four rows of angular spots on tail – ***Faxonius virilis*** p.6

Claw tips orange/red with black bands; rust colored bands on tail segments; usually with rust colored spots on sides – ***Faxonius rusticus*** p.5



Line drawings from The Crayfishes and Shrimp of Wisconsin, Hobbs and Jass, Milwaukee Public Museum, 1988

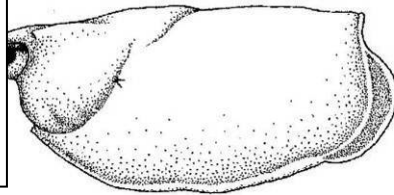
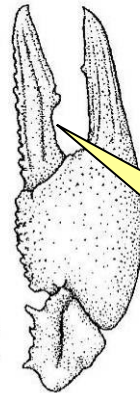
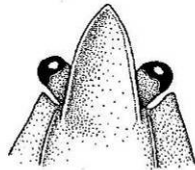
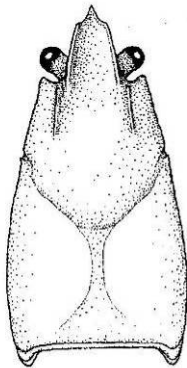


Photo by Craig Roesler



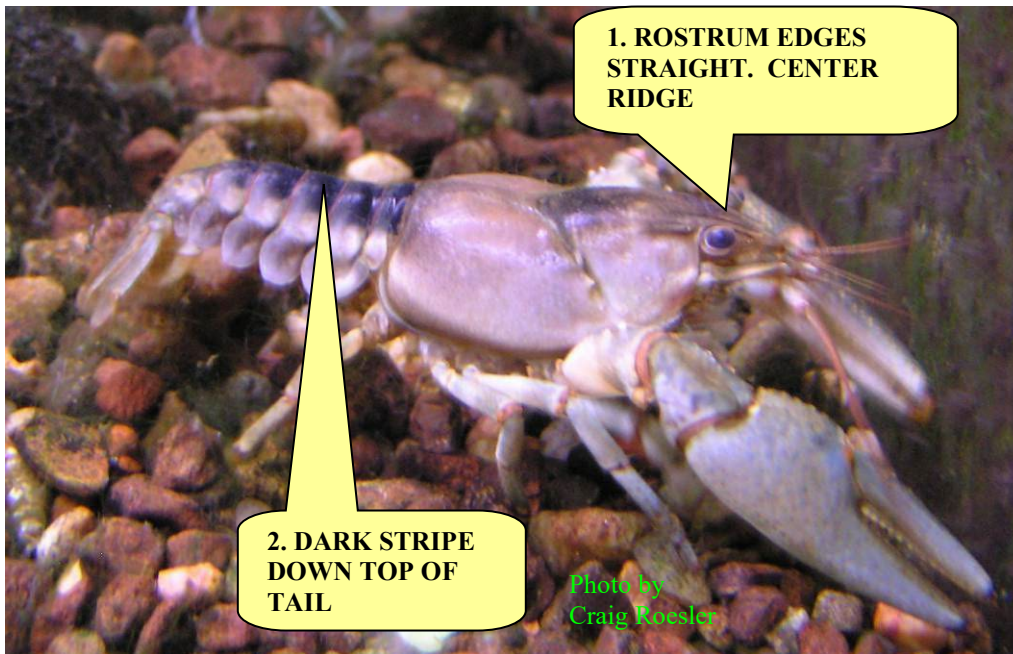
1. TUFT OF FIBERS ADJACENT TO CLAW HINGE

2. NOTCH NEAR BASE OF HINGED CLAW

CALICO CRAYFISH (*FAXONIUS IMMUNIS*)

This species is distributed statewide, but is uncommon. It is typically found in soft bottom areas, usually with aquatic plants present.

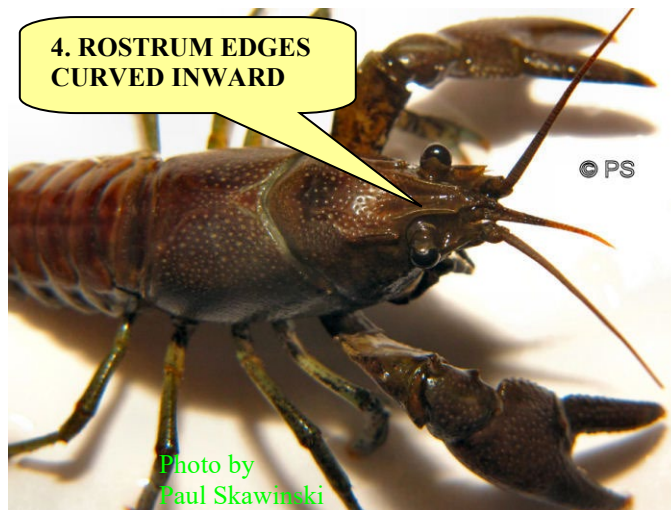
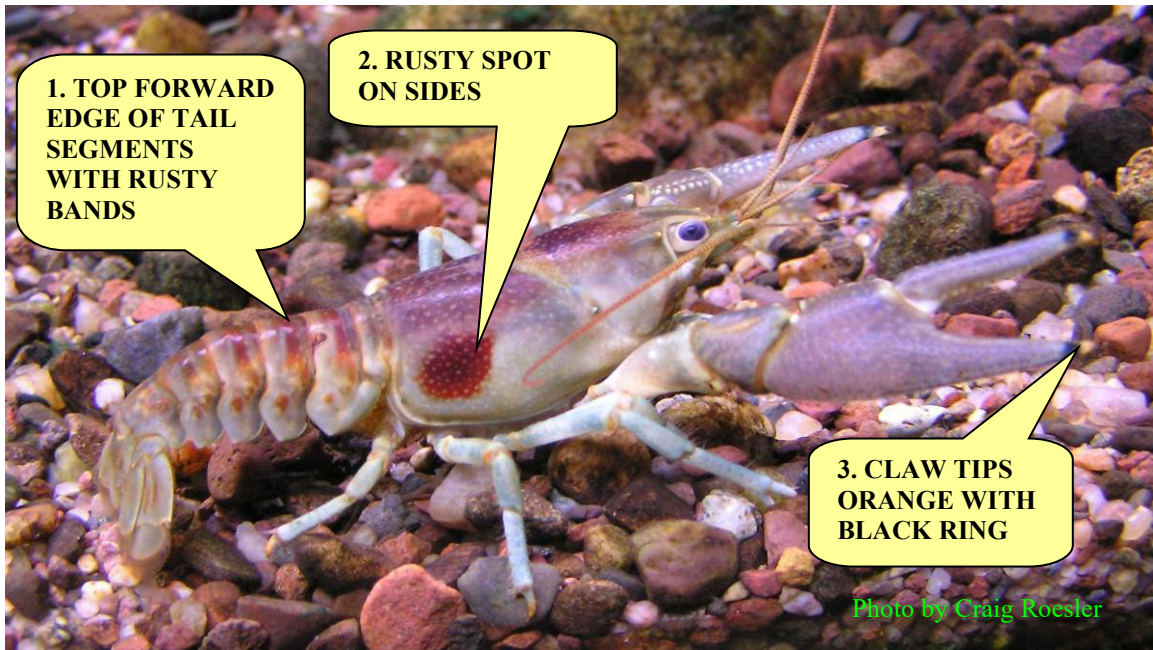
1. TUFT OF FIBERS ADJACENT TO CLAW HINGE; MOST FIBERS ATTACHED TO UNDERSIDE OF UNHINGED CLAW.
2. NOTCH NEAR BASE OF HINGED CLAW.
3. CLAWS WITH ORANGE/RED TIPS.



**NORTHERN CLEARWATER CRAYFISH
(*FAXONIUS PROPINQUUS*)**

This species is distributed statewide and is very common. It is usually found on gravel or rocky bottoms. It can be grey (pictured) or brown. Grey specimens are more commonly found in very clear waters.

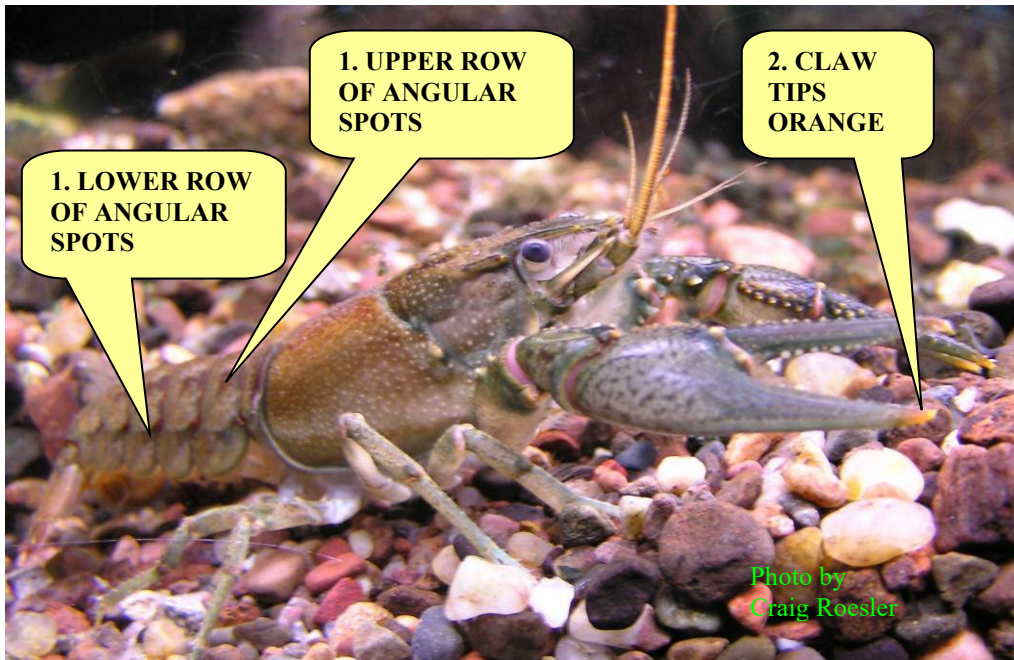
1. ROSTRUM EDGES STRAIGHT WITH RAISED RIDGE IN CENTER. RIDGE USUALLY DIFFICULT TO SEE, BUT CAN BE FELT WITH A FINE-POINTED OBJECT. RIDGE SHAPE / LOCATION VARIABLE.
2. DARK STRIPE DOWN TOP OF TAIL (ABDOMEN).
3. CLAW TIPS ORANGE WITH BLACK RING. RING SOMETIMES PARTIAL OR FAINT.



RUSTY CRAYFISH (*FAXONIUS RUSTICUS*)

This species is distributed statewide and is very common. It is found on a wide variety of bottom types. It is not native to Wisconsin, but has spread widely and causes serious ecological damage.

1. TOP FORWARD EDGE OF TAIL (ABDOMINAL) SEGMENTS WITH RUSTY BANDS.
2. RUSTY SPOTS ON SIDES. SOMETIMES VERY SMALL OR FAINT. OCCASIONALLY ABSENT.
3. CLAW TIPS ORANGE WITH BLACK RING. RING SOMETIMES ONLY PARTIAL OR FAINT.
4. ROSTRUM EDGES CURVED INWARD. SOMETIMES VERY SLIGHTLY. OCCASIONALLY STRAIGHT.



VIRILE CRAYFISH (*FAXONIUS VIRILIS*)

This species is distributed statewide and is very common. It is found on a wide variety of bottom types.

1. TAIL (ABDOMEN) WITH FOUR ROWS OF ANGULAR SPOTS, AN UPPER AND LOWER ROW ON EACH SIDE. UPPER OR LOWER ROW SOMETIMES FAINT.
2. CLAW TIPS ORANGE WITH NO DISTINCTIVE BLACK RING. ORANGE TIPS SOMETIMES VERY SMALL.
3. ROSTRUM EDGES USUALLY STRAIGHT. NO CENTRAL ROSTRUM RIDGE.