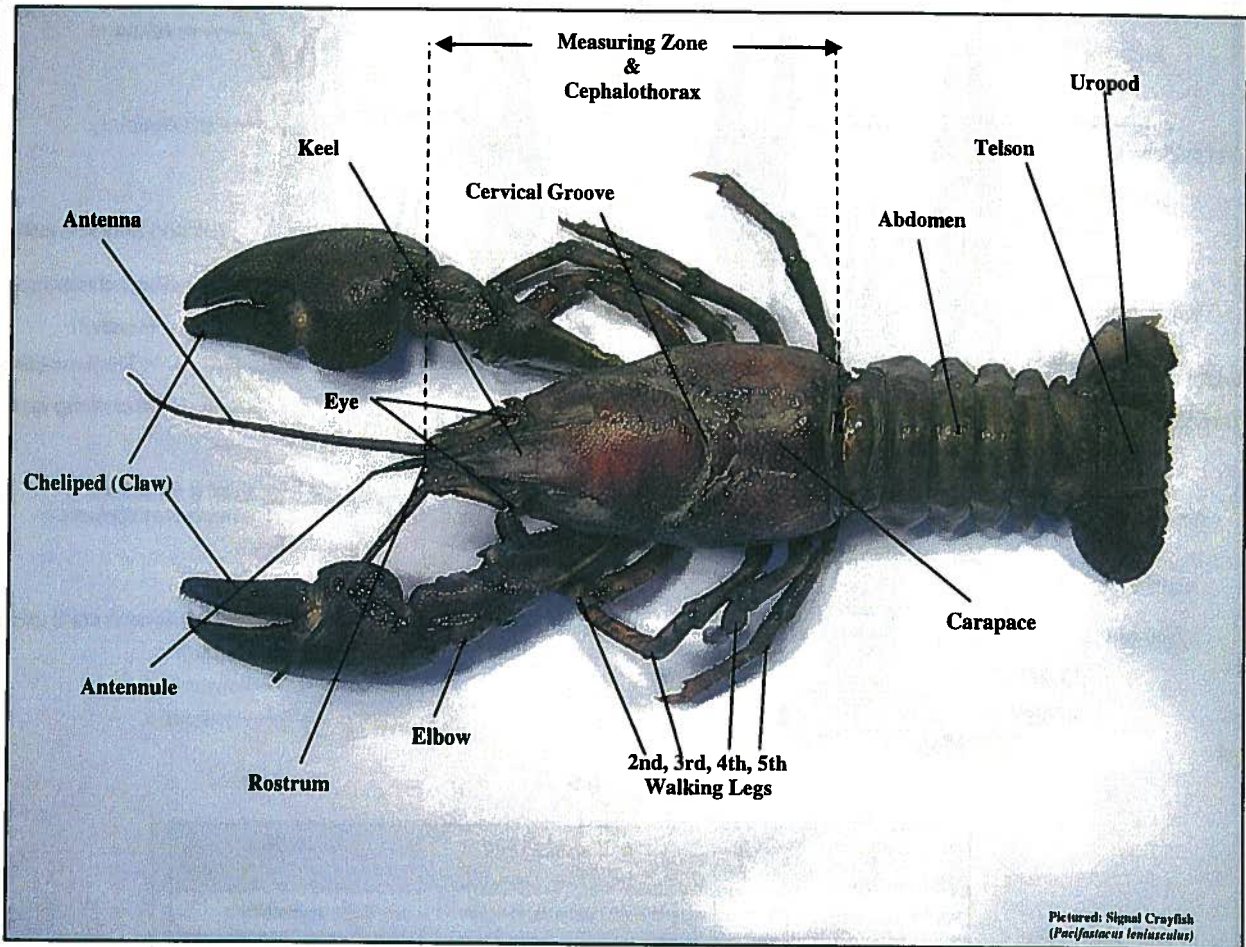




## Features of Freshwater Crayfish



### Definitions

**Abdomen:** Lower part of the body

**Antenna:** Sensory structure on front of head used to touch and feel

**Antennule:** Organs of balance, touch, and taste

**Carapace:** Protective shell covering the crayfish head and abdomen

**Cephalothorax:** The region on a crayfish comprised of the head & thorax

**Cervical Groove:** Semicircular notch that divides the head of the crayfish from the abdomen

**Cheliped:** The claws of freshwater crayfish (first walking legs)

**Eye:** Sight organ of a crayfish

**Keel:** A long ridge that runs lengthwise along the top of the head

**Measuring Zone:** Measure from the tip of the rostrum to the back of the carapace

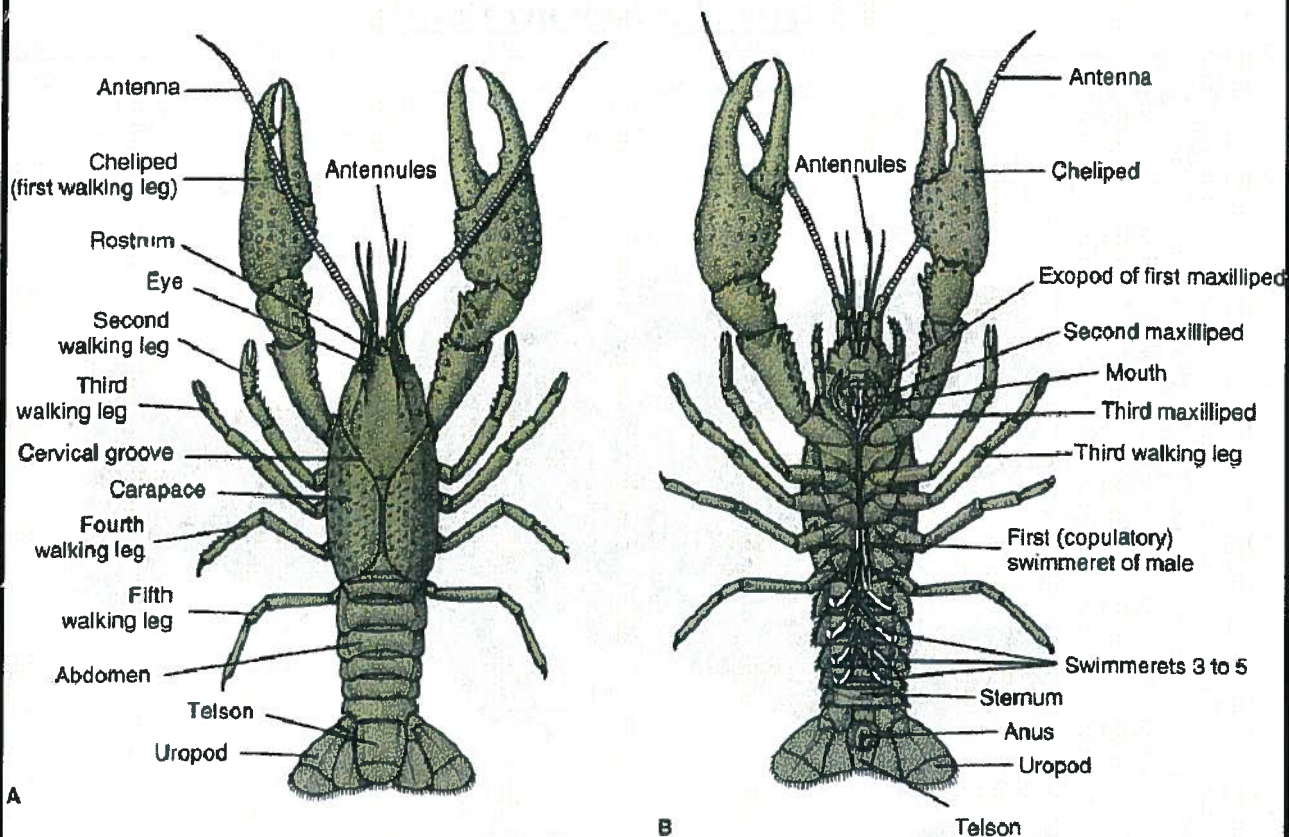
**Rostrum:** The long spike that sticks forward from the head between the eyes

**Telson:** The middle "panel" of the tail

**Uropods:** The two pair of "fans" on either side of the telson that make-up the tail, used for swimming

**Walking Legs:** Limb of a crayfish used for forward motion

## Other Crayfish Body Parts and Functions



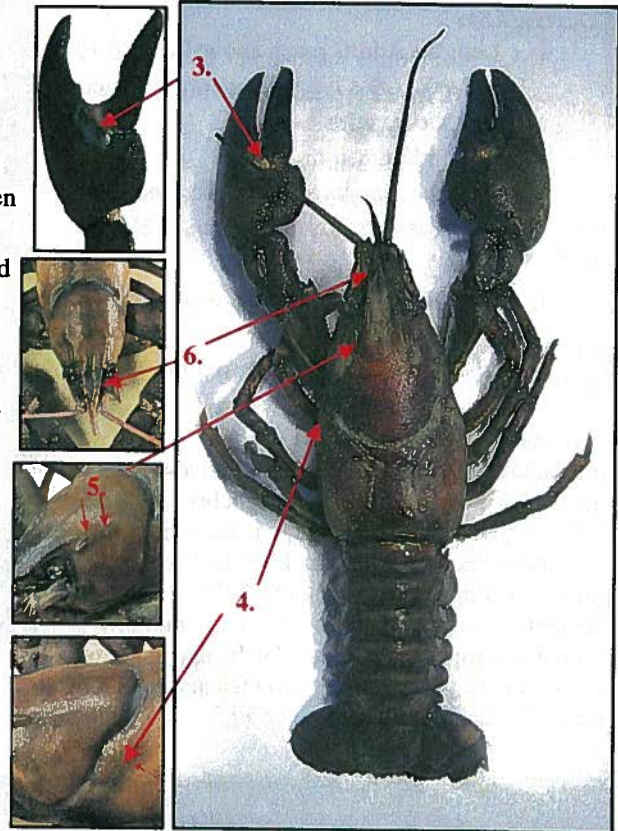
Region	Segment	Appendage (paired)	Function
Head	1	Antennule (w/ statocyst in base)	Touch, taste, equilibrium
	2	Antenna (w/ nephridiopore at base)	Touch and taste
	3	Mandible (jaw). Mouth between them.	Crushing and chewing food
	4	First Maxilla	Food handling
	5	Second Maxilla (with gill bailer - covers gill chamber)	Food handling + draw water over gills
Thorax	6	First Maxilliped	Touch taste food handling
	7, 8	Second and third maxillipeds*	Touch taste food handling
	9	1st Walking leg - Cheliped*	Defence, food capture, handling
	10	2nd walking leg*	walking and grasping
	11	3rd walking leg* (w/ female genital pore at base)	walking and grasping
	12	4th walking leg*	walking
	13	5th walking leg* (w/ male genital pore at base)	walking
	Abdomen	14	1st swimmeret (male/female)
15		2nd swimmeret (male/female)	Male: Transfer sperm to female Female: carry eggs Both: Water circ. for respiration
16, 17, 18		3rd, 4th, 5th swimmerets (biramous)	Female: Carry eggs Both: water circ. for respiration
19		Uropod and Telson (tail)	Backward swimming

**Signal Crayfish (*Pacifastacus leniusculus*):****ONLY NATIVE CRAYFISH TO WA.****Description:**

1. **Length:** typically 6–9cm (2.4–3.5 inches) long, although sizes up to 16–18 cm (6.3–7.1 inches)
2. **Color:** Bluish-brown to reddish-brown
3. **Claws:** large relative to body size, smooth claws. Underside is red in color. White to pale blue-green patch near the claw hinge.
4. **Carapace:** No spines on shoulders located behind cervical groove
5. **Cephalothorax:** Smooth with two pairs of post-orbital ridges.
6. **Rostrum:** Sides are smooth and more or less parallel until the apex

**Habitat:**

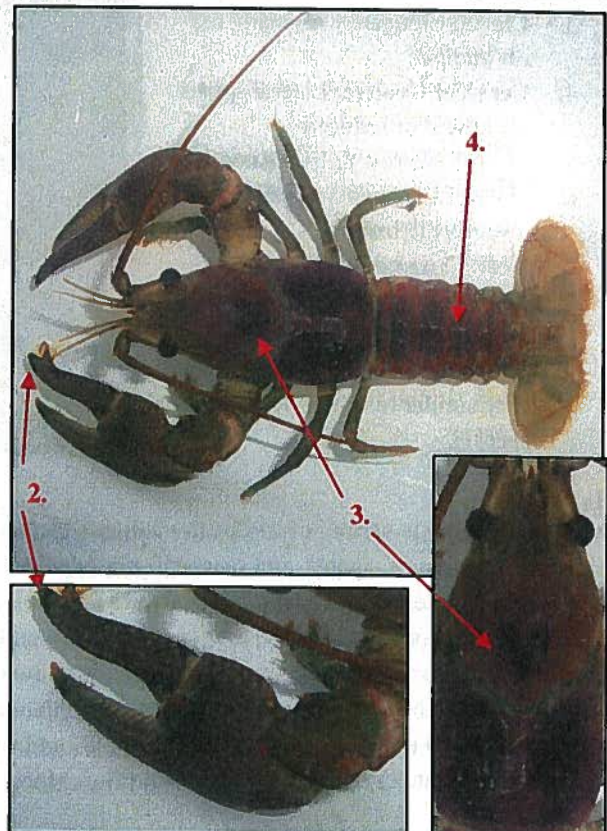
Generally prefers cool water with current over a rocky bottom; does not burrow; is highly adaptable, and can be found in a wide variety of habitats including coastal and mountain streams and lakes, reservoirs, and the saline waters in river deltas. It does not occur in waters with a pH lower than 6.0. Very active and migrates up and down rivers, as well as moving overland around obstacles.

**Rusty Crayfish (*Orconectes rusticus*):****NON-NATIVE INVASIVE****Description:**

1. **Length:** 10 cm (3.94 inches), males are usually larger
2. **Claws:** Robust, grayish-green to reddish-brown with black bands at the tips and fairly smooth
3. **Carapace:** Rusty spots (usually prominent) on either side. Spots are not always present or well developed
4. **Abdomen:** Rust-colored band appears down the center
5. **Walking Legs:** Generally they have a greenish color

**Habitat:**

Inhabits lakes, ponds, and streams that provide suitable water quality year-round. Substrates include clay, silt, sand, gravel, or rock, but are almost always found in areas with cobble and carbonate substrates and occasionally found in habitats with gravel substrate and woody debris. Prefers well oxygenated water and a temperature range of 68-77°F. Most often found in depths of less than 1m (3.3 feet).

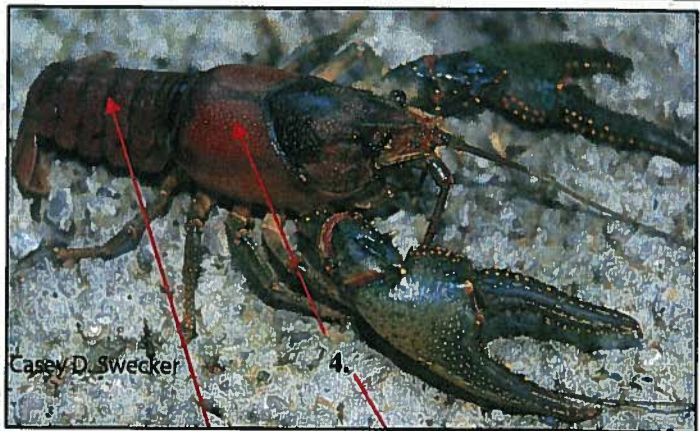


## Northern/Virile Crayfish (*Orconectes virilis*):

NON-NATIVE

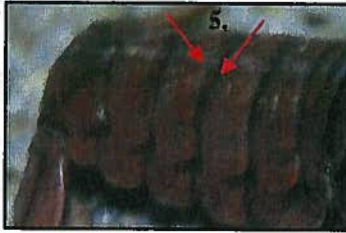
### Description:

1. **Length:** Adults reach about 13cm (5.12 inches), males typically growing larger than the females
2. **Color:** Reddish-brown
3. **Claws:** Often have dark specs and orange or reddish tips, over all green or blue-green
4. **Carapace:** Bumps on the medial side along the chelae
5. **Abdomen:** May have paired black marks



### Habitat:

Prefer cobble or rocky substrates and abundant logs, rocks, vegetation and other debris for cover. They are also known to dig burrows in river banks and under rocks when water levels are low. Can survive a temperature range of 32-90°F, but prefers temperatures between 75-77°F. Their mobility is halted in temperatures below 50°F. They are intolerant of poor water quality and high salinity, and prefer locations with a pH over 5.37.



## Red Swamp Crawfish (*Procambarus clarkii*):

NON-NATIVE

### Description:

1. **Length:** Adults reach about 5.5 to 12cms (2.2 to 4.7 inches)
2. **Color:** Dark red
3. **Claws:** Elongate with many red-ish bumps
4. **Cervical Groove:** Lateral spines are absent or reduced
5. **Elbow:** Narrow & Elongated
6. **Head:** Elongated and narrowing towards the front.
7. **Keel:** Does not have
8. **Rostrum:** Obvious triangular shape/sides taper to the front
9. **Juvenile:** Are not red and appear very similar to other *Procambarus* species.



### Habitat:

May inhabit a wide variety of freshwater habitats including rivers, lakes, ponds, streams, canals, and seasonally flooded swamps and marshes. Very tolerant and adaptable to a wide range of aquatic conditions including moderate salinity, low oxygen levels, extreme temperatures, and pollution. *P. clarkia* thrives in warm, shallow wetland ecosystems. In the cooler regions, it prefers small, permanent ponds because it is unable to survive predation by fishes in large water bodies. *P. clarkii* also frequently inhabits disturbed environments such as rice fields and irrigation channels and reservoirs. Populations have been negatively correlated with high elevation and flow velocity.