

## White Spot Syndrome Virus and Crayfish

White Spot Syndrome Virus (WSSV) is a viral disease that causes significant mortality and economic losses in farmed shrimp and prawns globally. Of increasing concern and recognition is the risk of WSSV spreading to and impacting wild populations of crustaceans and potential cascading ecosystem effects. The import of live crayfish, of any species, from any location poses a risk of WSSV introduction into Washington.

- ❖ WSSV can infect and kill a wide range of shrimp, crab, crayfish and other decapod crustaceans—including our native Signal crayfish.
  - ❖ WSSV can occur in marine, brackish and freshwater. For example, an infection in one crayfish in freshwater could spread to crab or shrimp in Puget Sound.
  - ❖ WSSV can persist outside a living host. For example, freezing infected crayfish may not kill the virus; the use of frozen, uncooked shrimp from infected sources as bait is a pathway for this disease to be transferred worldwide.
  - ❖ WSSV currently infects Red Swamp crayfish, both farmed and wild, in Louisiana. Some crayfish farmers have reported instances of up to 70% loss in production. Live crayfish utilized for science education may be sourced from infected populations.
  - ❖ Any crayfish, including our native Signal crayfish, sourced from other states or locations outside of Washington pose a risk as WSSV may be present but undetected.
  - ❖ Live Signal crayfish, our native species, sold by commercial sources in Washington may actually originate from waters outside of Washington where Red Swamp crayfish have become established.
- ❖ WSSV may be spread to Washington waters by releases from science education kit crayfish into the wild; improper disposal of those crayfish or aquarium water; or simply via a person who has had contact with the crayfish or their aquarium waters then having contact with the waters of Washington.
  - ❖ What's at risk? WSSV can impact our populations of native crustaceans putting those species, plus commercial and recreational fisheries at risk. WSSV may also result in a cascade of effects that adds to the existing challenges faced by our native species and ecosystems. For example, an infection may affect one or more species of crustaceans that are critically important prey for other organisms, such as salmon or steelhead.



*Image of prawn with WSSV infection (D. Lightner photo).*

For More Information, contact:

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