## Native Crabs

While not all-inclusive, this guide includes the species commonly encountered as molts in Washington.



## **Hairy Shore Crab**

Hemigrapsus oregonensis

Carapace: square to 50mm; 3 forward-pointing marginal teeth, 2 rostral bumps

Claws: rounded, often with fleshy tufts, no polka dots Walking legs: with fine sparse hairs when alive



**Purple Shore Crab** 

Hemigrapsus nudus

**Carapace**: square to 60mm; 3 marginal teeth, rounded inward; 2 subtle rostral bumps

Claws: rounded, often with polka dots

Walking legs: no hairs



## **Hairy Helmet** Crab

Telmessus cheiragonus

Carapace: diamond to 100mm; 6 prominent marginal teeth widest at the 5th; hairy

Claws: small, similar to walking legs; hairy

Walking legs: long, hairy



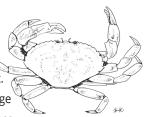
## **Graceful Crab**

Cancer (Metacarcinus) gracilis

Carapace: Oval to 115mm; widest at 9th tooth. 10th tooth appears as a notch behind widest.

Claws: no serrations on upper edge

Walking legs: long purplish, hairless



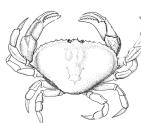
## **Dungeness Crab**

Cancer (Metacarcinus) magister

Carapace: oval to 230mm; 10 marginal teeth; widest at pronounced 10th tooth

**Claws:** serrations on upper edge

Walking legs: long light-colored, with hair when alive





## **Spider Crabs**

Multiple species of the family Majidae: (e.g., Pugettia producta, P. gracilis, Scyra acutifrons)

Carapace: longer front-toback than wide: rostrum protrudes far beyond eyes Claws: long, thin

Walking legs: long with sharp tips





**Pygmy Rock** Crab

Cancer (Glebocarcinus) oregonensis

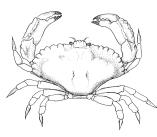


Pea Crab

Species of the family Pinnotheridae



**Black-clawed** Crab



## **Red Rock Crab**

Cancer productus

Carapace: fan to 200mm; 10 rounded, blunt marginal teeth, 5 bumps on protruding rostrum

Claws: large, muscular, with black tips

Walking legs: small, thin



## How to identify crabs

The shape of a crab's back shell ("carapace") is distinct. Group like-with-like as you work your way to species.

Marginal Teeth: Find the two eyes and count the number of jagged points ("marginal teeth") outside of each. This number is consistent for all crabs of the same species.

**Rostrum:** Look for bumps between the eyes (the "rostrum"). Does it protrude farther out then the eyes? Is it bumpy, sharp, or smooth? How many bumps are there? Each answer will point you to a different species.

**Ignore color!** Even European green crabs aren't always green and molts of all species often bleach out to a similar beige. Focus on the features above for a confident ID!









Lophopanopeus bellus

# <sup>≈</sup> "Crabdomen" Guide

## **European Green Crab**

Carcinus maenas

190

180

70

160

50

140

130

20

100

90





**Dungeness Crab** Cancer (Metacarcinus) magister





Note: Individual abdomens vary in shape and color.



Visit the Molt Search website wsg.uw.edu/ moltsearch or email crabteam@uw.edu for more information, including a full guide to Molt Search protocols.

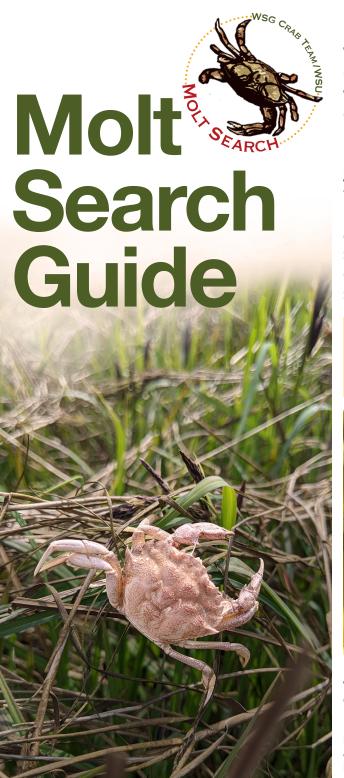
View all Molt Search reports at

mycoast.org/wa/crab

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Shrewsbury, Shropshire, Great Britain, Cancer (Metacarcinus) magister, Cancer productus, Hemi grapsus oregonensis illustrations reprinted by permission of Paul & Lynn Rudy, from Oregon Estuarine Invertebrates. Cancer (Metacarcinus) gracilis, Hemigrapsus nudus courtesy of Kirstin Holsman. Crab Team has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement PC-01J89501 to the Washington Department of Fish and Wildlife. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation





Molt Search is a program by Washington Sea Grant in partnership with WSU Extension. designed to expand monitoring for invasive European green crab and keep tabs on our native Dungeness crabs. It's a timed, systematic

search for crab shells ("molts") that can be done on any local shoreline, with findings submitted via the MyCoast app or webpage.



## Submit a report

A free MyCoast account is required to submit a Molt Search report. Visit MyCoast.org/wa or download the app to get started.



Molt Searches are valuable data, even when you report "No Molts Found" or find no sign of green crabs in your collection (like the submission pictured above).

Knowing where and when shorelines are free of molts improves our understanding of what habitats and seasons are best (or worst!) for crab growth. Help fill important gaps by Searching year-round and on unexpected shorelines.



## What's a "Molt"?

Growing crabs leave behind their old shell. Bearing perfect resemblance to the crabs that outgrew them, molts on the beach are a simple clue of who is living in nearby waters.

## 1. Prepare

The MyCoast app makes it easy to conduct a Molt Search. Choose any Washington shoreline with safe, legal access. Bring with you:

• A phone or camera

community science

monitoring of

program for systematic

European green crab

- One collection container per person
- A measuring device (calipers are the gold standard!)

## 2. Search

Your goal is to collect as many molts as you can find in the standardized time.

Begin your search by starting a timer with an alarm for a total of 20 person-minutes (20 minutes for one person; 10 minutes for 2 people, etc.). You can search by yourself or in groups of up to four people. Walk the shore, focusing your time in areas where tides have left debris behind (the "wrackline"), and collect as many crustacean molts as you can. Collect molts by hand one at a time. Don't spend time identifying molts as you collect them.

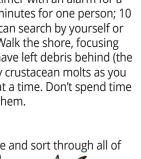
## 3. Identify

After the timer goes off, combine and sort through all of the molts. Take a clear overhead

photograph of your entire molt collection, regardless of what you've found. Make sure to include something for scale in your photo, like the ruler in this guide.

## 4. Submit

Submit your findings via the MyCoast.org app or webpage. You'll be prompted for the photo of your molt collection, along with additional details like the sex and width of any Dungeness or green crab molts you find.





Invasive European green crabs threaten marine resources in Washington. Early detection gives us the best chance to reduce green crab impact and spread. Molts can serve as an early indicator of the presence of green crab in a new area.