

# Ascophyllum nodosum

Native to Maine

Knotted Wrack,  
Knotted Kelp

Coastal  
Rocky Intertidal

## Growth Pattern



Filip Nuyttens, [www.marinespecies.org](http://www.marinespecies.org)



Look for an alga with an axial growth pattern, meaning that branches grow randomly from a single main stem. See the diagram below.

## Thallus (Body)



Filip Nuyttens, [www.marinespecies.org](http://www.marinespecies.org)



Look for an alga with rubbery branches that grow up to 60 cm long. Egg-shaped vesicles (air-bladders) are found along the branches.

GROWTH PATTERN	THALLUS CROSS-SECTION
 DICHOTOMOUS GROWTH	 ROUND
 AXIAL GROWTH	 FLATTENED
	 FLATTENED WITH MIDRIB

## Color



Jessica Muhlin

PERMITTED USE

Look for an olive-yellow or green-brown alga.

## Other Information



M.D. Guiry

PERMITTED USE

In May and June receptacles emerge on the alga. Individuals with small, yellow receptacles are male. Individuals with olive-green receptacles are female.

## Similar Species

Knotted Wrack can be confused with Bladder Wrack. Bladder Wrack branches are wider and have a distinct midrib (line running down the middle) with paired vesicles (air-bladders). The vesicles of Knotted Wrack are not paired. Knotted Wrack is more olive-yellow than Bladder Wrack when found on shore.

## Did You Know?

Knotted wrack provides a place to live, hide from predators, feed, and breed for over 100 animal species! How many animals did you see in the knotted wrack at low tide? Add your biodiversity count to your Vital Signs datasheet!

Researched and created by Nicole Waite

Help us improve this species card! Contact us with your updates.



Gulf of Maine  
Research Institute



[www.vitalsignsme.org](http://www.vitalsignsme.org)