

Ascophyllum nodosum

Native to Maine

Knotted Wrack,
Knotted Kelp

Coastal
Rocky Intertidal

Growth Pattern



VS user Rock3, Loranger Middle School



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

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

Thallus (Body)



VS user Rock3, Loranger Middle School



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

Color



VS user Phe coast, Falmouth Middle School



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

Other Information



VS user Neon Replay, Falmouth Middle School



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!