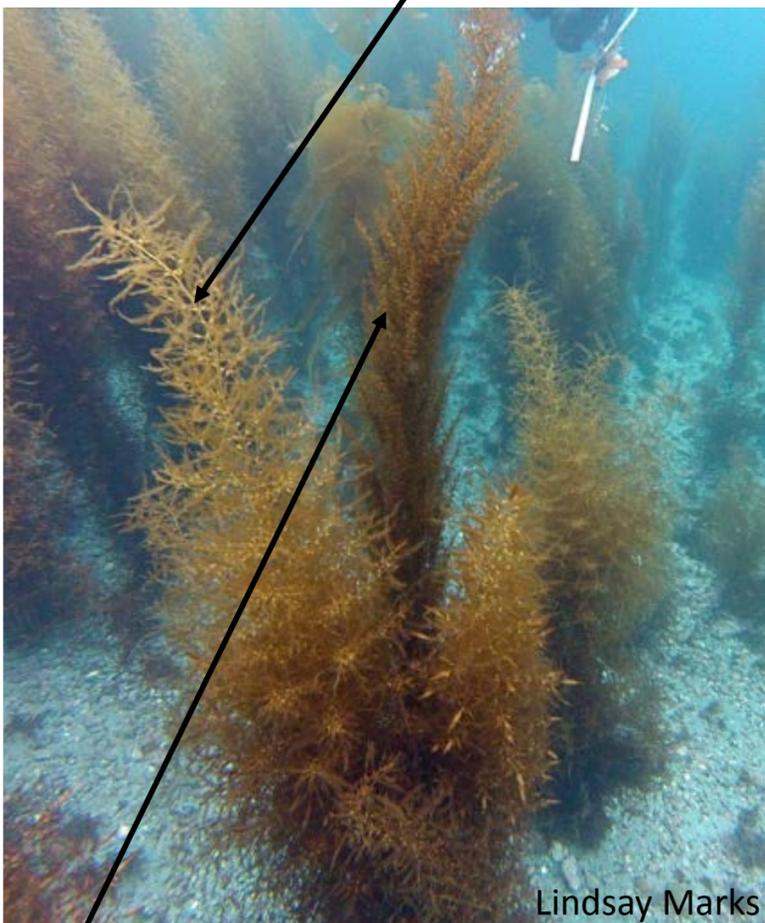




**Sargassum horneri:** Fern-like branches with notched tips, zigzag stipe (one stipe per holdfast but these can grow on top of one another...), oval pneumatocysts, cigar-shaped reproductive structures. Up to 3m long (all photos by Dan Richards except where noted).



**Sargassum muticum:** Felty/fibrous holdfast (1-several stipes per holdfast), tough and cylindrical alternating branches that are whorled at the base with flattened and toothed leaves that resemble Holly, spherical and single pneumatocysts. Up to 4m long.



www.melevsreef.com



www.seaweed.ie



**Caulacanthus okamurae:** densely tufted, dark purple to brownish, profusely and irregularly branched, horn-like appearance at tips. Up to 30 mm long, attached by creeping stolons often on mussels/epiphytic. Usually smaller, redder, and softer than *Endocladia muricata* (photos by Dave Lohse unless otherwise noted).



www.mer-littoral.org © W. Bay-Nouailhat

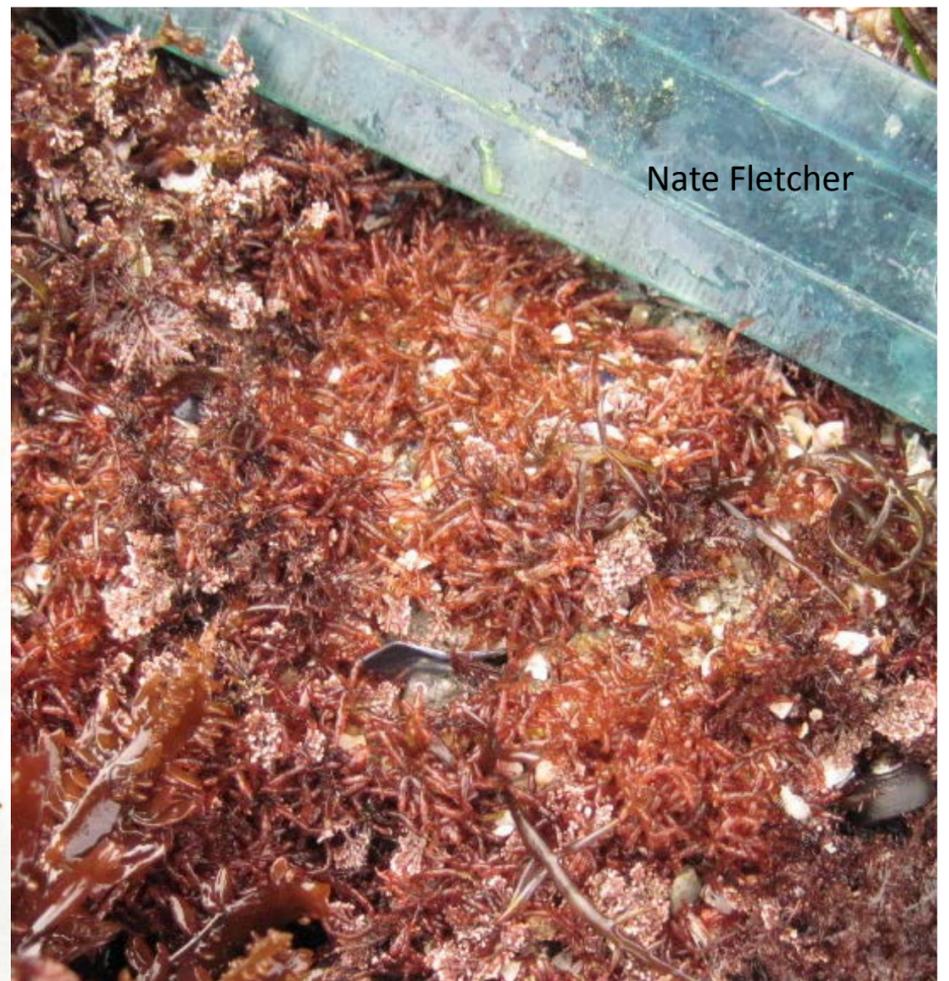


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**Didemnum vexillum:** “marine vomit,” may be orange, pink, yellow, tan, cream. Surface has veins and pores and feels smooth, gelatinous, and leathery (not slimy). Can be lobed (resembling dripping wax). Can reproduce both sexually and asexually via fragmentation.



[www.tbg.kahaku.go.jp](http://www.tbg.kahaku.go.jp)



Nate Fletcher

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

**Lomentaria hakodatensis:** deep red, bushy, 3-10 cm tall, radial branching, cylindrical branches, grows on rock



5 mm

André Rio



[www.boprc.govt.nz](http://www.boprc.govt.nz)



[www.teara.govt.nz](http://www.teara.govt.nz)



[www.dfw.state.or.us](http://www.dfw.state.or.us)

**Undaria pinnatifida:** yellowish to dark brown, claw-like holdfast, flat stipe that becomes a midrib with broadly lobed blade, usually 1-2 m long, frilly sporophylls coil around stipe when mature. Occurs in sheltered areas, especially on marinas, buoys, and floating structures in harbors.



***Watersipora subtorquata***: Colonial bryozoan, grows on hard substrata, small colonies are roughly circular, larger colonies can be lobed and frilly. Usually orange/red with black. First widely noted along the west coast of N. America in the 1990s; likely introduced from ship hulls. Can be confused with *Watersipora arcuata* (another exotic species on the west coast). It is possible that there is a native species of *Watersipora* on the Pacific Coast that is distinct from the two exotic species. Photos by Steve Lee.

