



Membranipora membranacea

Bryozoans

Threat scores

1. Ecological impact

- “Contributed to defoliation of kelp bed at Cape Neddick, Maine. Outcompetes other encrusting growth such as *Electra pilosa* (another bryozoan) and *Obelia geniculata* (a hydroid). Kelps encrusted with *M. membranacea* are more susceptible to fracturing during storms. Heavy encrustaceans can also affect the abundance and composition of organisms in affected kelp communities. In New England Sea urchin *Strongylocentrotus droebachiensis* abundance dropped from an average of between 20 and 280 per square meter before the invasion to 0.47 per square meter after the invasion” (Molnar 2008).

2. Invasive potential

- “Introduced to area via shipping on hulls or in ballast water. *Membranipora* became the dominant kelp epiphyte off the coast of New Hampshire and southern Maine in three years. Has higher settlement and faster growth rates than native species with no known predators” (Molnar 2008).

3. Geographic extent

- Locally pervasive

4. Management difficulty

- No known effective controls in introduced range.



Geography and Habitat

1. Origin: Europe (Berman et al. 1992). Alaska to Baja California (Meinkoth 1981).
2. Introduced in ballast water.
3. Marine, estuaries/bays
4. On kelps and seaweeds near the lowtide line and in shallow water

Invasion Pathways

1. Ballast Water and Sediments
 - Accidental known

Non native locations

1. 40- Gulf of Maine/Bay of Fundy
2. 41- Virginian

Sources

1. Molnar, Jennifer, et al. 2008. “Assessing the global threat of invasive species to marine biodiversity.” *Frontiers in Ecology and the Environment*. 6 (9), pp. 485-492.
2. <http://conserveonline.org/workspaces/global.invasive.assessment>
3. http://www.wallawalla.edu/academics/departments/biology/rosario/inverts/Bryozoa/Class_Gymnolaemata/Order_Cheilostomata/Membranipora_membranaceaDLC2007-12s.jpg