



Styela plicata

Solitary Ascidian, Leathery tunicate, pleated sea squirt, sea squirt

Threat scores

1. Ecological impact
 - Causes losses in aquaculture; resource and spatial competition with native species.
 - Has replaced native solitary tunicates, *Pyura haustor* and *Ascidia ceratodes* (Molnar 2008).
2. Invasive potential
 - Potential for short distance planktonic larval dispersal. Plankton larvae settle quickly. Long term dispersal requires human assistance.
3. Geographic extent
 - Regionally pervasive
4. Management difficulty
 - Established in San Diego, but 30 years after its introduction it still had not become abundant (Molnar 2008).



Geography and Habitat

1. Origin: North Carolina and Florida to the West Indies (Meinkoth 1981). Abundant in northern Gulf (Kaplan 1988).
2. First introduction: Discovered in San Diego Harbor, California (USA) in 1915
3. Introduced to Australia accidentally with the deliberate translocation of fish or shellfish
4. Marine, coastland, fouling communities, estuaries/bays, coral reefs
5. *S. plicata* is found from the low intertidal zone to depths of 30m (Molnar 2008).

Invasion Pathways

1. Hull/Surface Fouling
 - Accidental possible
 - Cause- shipping/recreational boating
 - Fouling on aquaculture structures transported by ships and recreational boats
2. Ballast &/or Fouling
 - Accidental possible
 - Cause- shipping
 - Fouling on aquaculture structures transported by ships
3. Aquaculture and Mariculture Activities
 - Accidental probable
 - Cause- Attached to aquaculture structures
 - Fouling on aquaculture structures transported by ships

Non native locations

1. 58- Northern California
2. 59- Southern California Bight
3. 70- Floridian

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.
1. <http://conserveonline.org/workspaces/global.invasive.assessment>
2. <http://www.pagurus.it/marino/schede/invertebrati/Tunicati/images/Styela.jpg>