



## Sargassum muticum

### Strangle weed, Wireweed

#### Threat scores

1. Ecological impact
  - Forms dense monospecific stands. It can accumulate high biomass and may quickly become a strong competitor for space and light. Dense *S. muticum* stands may reduce light, dampen flow, increase sedimentation and reduce ambient nutrient concentrations available for native kelp species (Molnar 2008).
  - Large mats of weeds are eventually cast up on shores and cause problems when rotting, i.e. producing offensive smells on resort beaches
  - It blocks propellers and intakes. It is also a fouling organism on oyster beds and a nuisance to commercial fishermen, fouling their nets (Molnar 2008).
2. Invasive potential
  - It is highly fecund producing fertile receptacles which are cast off during the summer months. These float and can survive for up to 3 months. The receptacles are androgynous with self-fertilization; viable germlings are released (Molnar 2008).
  - It spread rapidly along the English south coast at about 30 km/year and along the north-west American coast at an average rate of about 60 km/year, mostly by drifting, fertile adults (Molnar 2008).
  - Higher temperatures are favorable and will encourage its spread further south.
3. Geographic extent
  - Locally pervasive
4. Management difficulty
  - No treatments, chemical, biological, or manual have been successful in controlling or eradicating this invasive. Fragmentation regenerates new plants immediately.



#### Geography and Habitat

1. Origin: Asia
2. First introduction: 1944
3. British Columbia, Canada in 1944
4. Marine, estuaries/bays, coastland, aquaculture
  - Occupies mainly sheltered shores and prefers hard substrate to settle and develop.

#### Invasion Pathways

1. Ballast Water and Sediments
  - Accidental possible
2. Stocking in Open Water
  - Accidental known
  - Cause- oyster farming
  - Introduced with Japanese oysters in Washington state, US
3. Natural Spread
  - Probable
  - Able to drift in currents, likely spread this way from France to Britain

4. Hull/Surface Fouling
  - Accidental possible

#### Non native locations

1. 56- Puget Trough/Georgia Basin
2. 57- OR, WA, Vancouver Coast and Shelf
3. 58- Northern California
4. 59- Southern California Bight

#### 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.seaweed.ie/images/SarmutBladders.jpg>