



Zostera japonica

Dwarf eelgrass

Threat Scores

1. Ecological impact
 - Has contributed to declines in shorebird foraging habitats by causing changes in benthic invertebrate community structure.
 - Posey (1988) noted that the introduction of *Z. japonica* has changed the physical habitat as well as the richness and densities of resident fauna.
2. Invasive potential
 - Birds disperse seeds over long distances. Seeds detached from flowering shoots can disperse naturally through drift.
 - Potential for human assisted transport in Japanese oyster shipments.
3. Geographic extent
 - Locally pervasive
4. Management difficulty
 - Imazapyr & glyphosphate killed both *Z. japonica* and native *Zostera*, but both had recovered within 1 yr.
 - Some physical (digging) effective if constantly maintained, but strong tides disperse fragments which lead to revegetation.



Geography and Habitat

1. Origin: Asia
2. First introduction: late 1950's
3. Introduced to Washington through the shipment of Japanese oysters (Washington State Exotics Expedition, 2000).
4. Marine, estuaries/bays, intertidal zones, brackish water, coastland
5. A submerged hydrophyte of intertidal marine and estuarine habitats

Invasion Pathways

1. Stocking in Open Water
2. Accidental known
3. Cause- oyster farming
4. Introduced with Japanese oysters in Washington state, US (1920s)

Non native locations

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

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.padillabay.gov/images/gwozdzfigi.jpg>