



## Mytilicola orientalis

### Mytilicola disease, Red worm, parasitic copepod

#### Threat scores

1. Ecological impact
  - “Known to infect *Ostrea edulis*, a Mediterranean native, and the blue mussel *Mytilus edulis* as well as a wide range of other bivalves including mussels, clams and cockles. Considered a serious pest, with potential for serious negative affects on oyster industry in Ireland” (Molnar 2008).
2. Invasive potential
  - Believe introduced with seed oysters. Potential for future distribution in contaminated spat.
  - Also possible to transport on ships hulls.
3. Geographic extent
  - Locally patchy
4. Management difficulty
  - “No known methods of prevention or control. Bivalves from areas known to be infected (currently or historically) should not be moved to areas with no record of *Mytilicola* spp.” (Molnar 2008).

#### Geography and Habitat

1. Origin: Japan and Korea
  2. Introduced to Pacific coasts of USA with shipments of Japanese oysters as early as 1938.
  3. “Believed introduced to Japan with seed oysters, now widely spread along the west coast of North America (incl. Canada's west coast) & recently been introduced to France. May established in Ireland due to transfers of *C. gigas* spat from France” (Molnar 2008).
1. Aquaculture, host
  2. “An intestinal copepod, present in the guts of many bivalve species, with original Asian hosts including the Pacific oyster” (Molnar 2008)

#### Invasion Pathways

1. Stocking in Open Water
  - Accidental probable
  - Cause- aquaculture
  - Believed transported in contaminated oyster spat
2. Canals that connect waterways
  - Accidental possible
  - Lessepsian migrant
  - Transported via shipping through Suez Canal
3. Hull/Surface Fouling
  - Accidental possible
  - Cause- hull fouling
  - Transported on ships hulls

#### Non native locations

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