

Bill Dewey Director of Public Affairs

Climate & Ocean Acidification Adaptation in West Coast Shellfish Aquaculture

## U.S. West Coast Shellfish Products



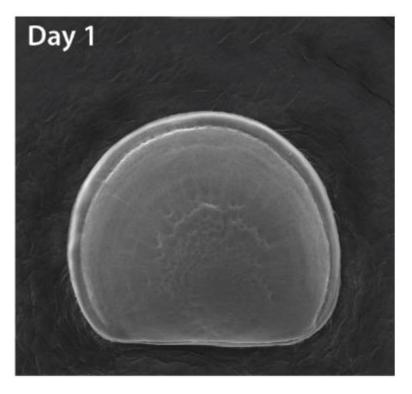
## Shellfish seed production

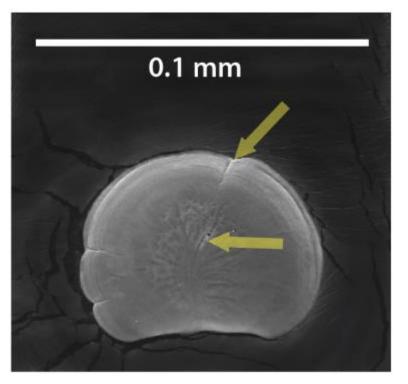


## Day old oyster larvae

Abundant carbonate ions available

Insufficient carbonate ions available





## Healthy

## Not healthy

## Panic/Adaptation

- Ramped up monitoring and research
- Treating hatchery rearing water
- Breeding OA resistant oysters
- Expanded seed production in Hawaii
- Experimenting w/seaweed/seagrass refuges
- Potentially shifting to less vulnerable species











Former Washington Governor Christine Gregoire

## www.oainwa.org

Washington State Blue Ribbon Panel on Ocean Acidification



### Ocean Acidification: From Knowledge to Action

Washington State's Strategic Response



November 2012

# Other climate impacts of concern for shellfish growers

- Thinner shells weaker byssal threads on mussels
- Sea Level Rise/more severe storms impacts on water quality and shoreline infrastructure
- More frequent and more toxic Harmful Algae Blooms
- Increasing Vibrio bacteria and associated human health concerns
- Impacts on animal health, pests, invasive species





### Taylor Shellfish & Hama Hama are founding members





#### **CLIMATE CHANGE STORIES**

### Shellfish Growers Climate Coalition

Shellfish growers, wholesalers and restaurateurs from across the United States are uniting to speak up on climate.

## Nature.org/shellfish4climate

## Other OA & Hypoxia Resources

- NOAA's Ocean Acidification Program
- <u>Washington Ocean Acidification Center</u>
- <u>West Coast OA & Hypoxia Science Panel</u>
- <u>California OA & Hypoxia Science Task Force</u>
- Oregon Coordinating Council on OA & Hypoxia
- C-CAN California Current Acidification Network
- OA Information Exchange
- NOAA's IOOS Integrated Ocean Observing System
- GOA-ON Global Ocean Acidification Observing Network
- International Alliance to Combat Ocean Acidification
- Interagency Working Group on Ocean Acidification



## Bill Dewey Director of Public Affairs Email: billd@taylorshellfish.com Cell: (360) 790-2330