Public Perception Aquaculture and the Role of Aquariums

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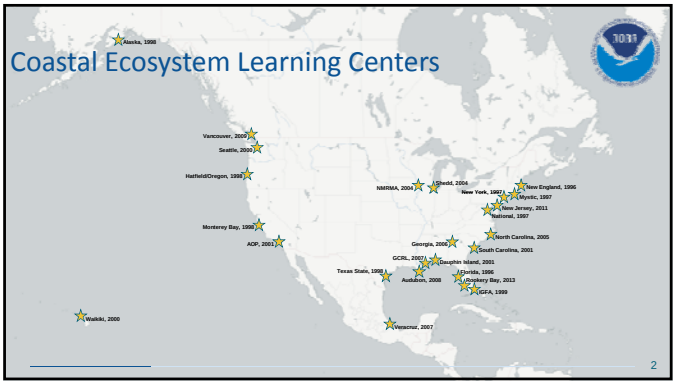
2017 Knauss Fellow
NOAA Office of Education
Knauss Brown Bag Seminar
November 30, 2017

Coastal Ecosystem Learning Centers



CELC goal and strategic plan

Function in a unified manner to engage the public in protecting coastal and marine ecosystems.

- Improve ocean and climate literacy among our audiences.
- Increase participation in coastal and ocean conservation and stewardship activities.
- Foster our audiences' relationship with the coastal environment and increase community resilience.
- Establish and support a CELC community of practice with emphasis on cross-institution communication, coordination, and professionalism

The Opportunity

- Aquaculture is an emerging issue with direct connections to NOAA and CELC members
- The CELC network offers NOAA a unique opportunity to engage millions of aquarium visitors on the latest advancements in aquaculture and its multiple benefits

Draft Objective

- To increase the public's understanding of aquaculture as:
  - a source of domestically produced, safe, and sustainable seafood
  - a tool for conservation and restoration of coastal and marine ecosystems
  - a catalyst for local economic development
- Develop:
  - A common set of unified messages and specialized set
  - A national campaign strategy

Aquaculture Perception in US

- 47% of US has negative view of farm-raised seafood (Bacher 2015)
- Factors for negativity:
  - High recreational value of place (Gibbs 2009)
  - User conflicts for finite coastal space (Bacher 2015, Wrigley 2017)
  - Local unrelated environmental disasters (Froehlich et al. 2017)
  - Lack of involving stakeholders (Bacher 2015)
  - Income level (Wrigley 2017)

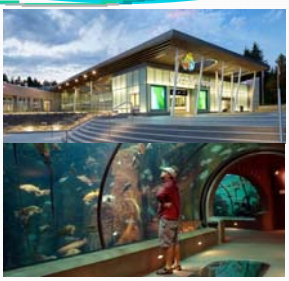
Regional Aquaculture

- The attitude towards aquaculture varies among different regions of the US.
- Beyond common messaging, encourage individual CELC members to pick which elements, practices, and species they choose to highlight further.

Credit: Cindy Sandoval (NOAA Aquaculture)

Pacific Northwest

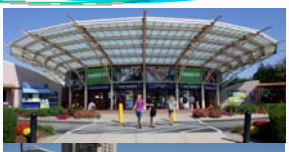
- Mollusks, salmon, sablefish, and seaweed
- Negative perception on aquaculture (finfish)
- Bad reputation of salmon farming because perception of "pristine" coastlines
- Wild products superior (Hall and Amberg 2013)



Aquariums: Seattle, Oregon, Vancouver Aquarium

New England

- In RI, support depends where aquaculture is occurring, size of operation, and how aquaculture is conducted. Residents with water view trust permitting agent less (Dalton et al. 2017).
- For Northern New England's inshore, commercial fishermen, nearly 1/3 willing to consider getting into open ocean aquaculture(Tango-Loy and Robertson 2002).
- At a seafood festival in New Hampshire, respondents more familiar with marine aquaculture were more positive about it (Robertson et al. 2002).



Aquariums: NE Aquarium, Mystic, NYA

Alaska

- Seaweed, shellfish, king crab enhancement, and salmon hatcheries
- In Southeast Alaska and Ketchikan, residents saw aquaculture as a threat to their wild salmon fisheries, which perhaps could damage their economies and ecosystems (Hamilton and Thomas 2015)

Alaska Sea Life Center, Seward, AK

The Gulf

- Oysters and offshore fish farms
- Low concern about aquaculture on FL's Gulf Coast, where industry is strong (Hamilton and Thomas 2015)

Aquariums: FL Aquarium, Audubon, Rookery Bay, Dauphin Island, Veracruz

Recommendations

- Be transparent and open with when working with them (Bacher 2015)
- Work with groups less heard in aquaculture conversations (low-income, e.g) by acknowledging potential impacts (Wrigley 2017)
- Conduct a communications/education campaign (Mazur and Curtis 2008)
- Schedule fish farm visits and public talks (Bacher 2015).
- Make sure people understand aquaculture's social aspects, which could be incorporated into curricula (Mazur and Curtis 2008)
- Acknowledge **place** and shape dialogue based on region's concerns and needs (Murray and D'Anna 2016)

Next Steps

- For literature review:
  - Fill regional gaps
  - Coordinate with Regional Aquaculture POCs with Sea Grant and NOAA
  - Conduct primary social study, analyze, and report
- For initiative:
  - Finalize recruitment of CELC institutions
  - Hold teleconference with CELCs
  - Coordinate on landscape analysis
  - Establish connections between CELC institutions and appropriate NOAA staff and resources
  - Develop collaborative space to allow access to the latest, science-based information on aquaculture
  - Professional development opportunities for aquarium staff

Questions?

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