

# Oceans Alaska Research and Development Priorities

10/26/11

## Priorities:

1. (H) Domestication of established shellfish species on the west coast
  - a. Secure seed supply, of existing seed types, oyster and geoduck
  - b. Domestication of Pacific oysters, regionally specific to different areas of Alaska
  - c. Secure Alaska broodstocks developed already
  - d. Hatchery development
  - e. Increasing Nursery capacity
  - f. Improved quality of the seed
2. Cooperative studies/ research/ monitoring
  - a. Genetic research
  - b. New species production
3. Increase shellfish production
  - a. Need new farmers, lease site, seed supply, financing
  - b. New farms in a region to work together, ie. Processing, shipping
  - c. Need economically viable base or infrastructure, to reduce shipping cost, increase sales
4. Shellfish education, training and outreach
  - a. For new and existing farmers
    - i. mentoring program
    - ii. continuing education
  - b. To attract new farmers
  - c. The public, outside the mariculture sphere
  - d. Kids, to public schools
5. Shellfish disease and pathology management
  - a. Ocean acidification and impact on spat
    - i. Farmers could perhaps be convinced to monitor on a regular basis, as it is something they should already be doing. Education will be needed.
6. Shellfish ecology / site selection
  - a. Impacts of shellfish farming
  - b. Benefits of shellfish farming
  - c. Identify site areas in economically viable clusters in SE AK.
7. Enhancement and restoration of native shellfish stocks
  - a. Sea cucumbers enhancement
  - b. Geoduck enhancement
  - c. Abalone
  - d. Sea urchins

- e. Subsistence harvest impacted clam beach enhancement
  - f. Kelp (sugar laminaria)
  - g. Polyculture
  - h. Add our voice to those that are working on sea otter issue (H)
  - i. ID enhancement needs, work to enhance those that are feasible (M or L)
8. Invasive species management
- a. Tunicates
  - b. European green crab
  - c. Northern anchovies
9. Human health and shellfish
- a. PSP,
    - i. do literature search on depuration and retention of toxins
    - ii. investigate alternative methods of PSP testing
  - b. Vibrio
  - c. Domoic acid accumulation
  - d. Heavy metals accumulation, cadmium
10. Water quality
11. New methods and new products
- a. Investigate methods of processing
    - i. Live holding of geoducks
    - ii. Superchilling oysters
    - iii. Other value added processing methods (eg. Cockles)
  - b. Library of what is already being done
  - c. Farming systems, harvesting, culture
    - i. To reduce mortalities
    - ii. To reduce labor needs
  - d. Ergonomics
12. Marketing strategies
- a. Self marketing
  - b. Websites
  - c. Ongoing and cooperative in nature
13. Policy and regulations
- a. Foster a positive regulatory environment
  - b. Need to change policy at state level regarding importation of other species other than C. gigas.
  - c. Board of fish needs to be approached.