Mussel farm aquaculture

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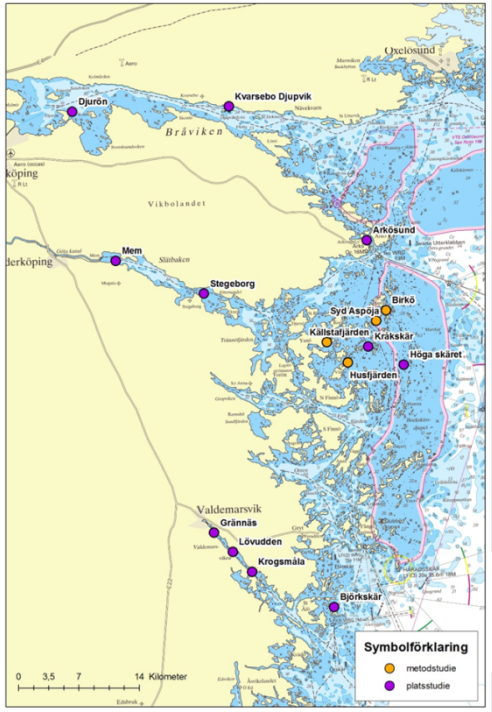
Background

- Many measures are needed to combat eutrophication.
- Pilot scale mussel farms in 2009-2011.
- Evaluation of
  - nutrient uptake
  - contaminant content
  - locations
  - method/substrate
- Great potential for mussel farming.



- LOVA-funded musselproject
  - Economic valuation of different usage of blue mussels
- EU-project: Baltic Eco Mussel
  - Achieve a commercially-viable mussel economy in the Baltic Sea Region.
- EU seedmoney project: Baltic Blue Growth
  - Remove the last obstacles for up-scaling of Baltic blue-mussel farms, and to up-scale production of mussel-meal that can replace fish meal in fodder for fish and poultry.
- Programme of Measures according to the Water Framework Directive
  - Achieve good environmental status

Application procedure

- Who owns the water? Need an approval.
- Mussel farming requires a permit under the fishery legislation.
- Apply for a ”permit for aquaculture” from the County Administrative Board (CAB)
  - Species? Risks?
  - Localisation
  - Approx. 1 month
- Approval from the municipality
  - Mussel farmers must show that they comply with the rules in the Environmental Code.

Regulation of fisheries, aquaculture and the fishing industry (1994:1716)

Environmental code

is to be applied so that:

- human health and the environment are protected against damage
- valuable natural and cultural environments are protected and preserved
- biodiversity is preserved
- the use of land, water and the physical environment in general is such as to secure long-term good management in ecological, social, cultural and economic terms
- re-use and recycling, as well as other management of materials, raw materials and energy are encouraged so that natural cycles are established and maintained.

Follow up of mussel farms

- Self-monitoring according to the Environmental Code
  - Does the farm cause adverse effects on the surrounding environment? Eg. oxygen levels and bottom macrofauna

- Self-monitoring according to National Food Agency's regulation
  - If cultivation of food – need to monitor toxic algal blooms and bacteria

Marine spatial planning

Identify suitable locations through GIS-based mapping

- Depht (6-20 m)
- Low wave exposure
- Soft bottom substrate
- Rapid water turnover
- Factors influencing growth rate eg. salinity, nutrients, oxygen levels and temperature.
- Conflicting interests eg. shoreline protection, nature reserves, harbours, polluted sites and outdoor recreation.

Regional authorities usually have all of the above information!

Thank You!

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