

Upcoming Research: Workshop on the State of Knowledge Related to Scallop Enhancement



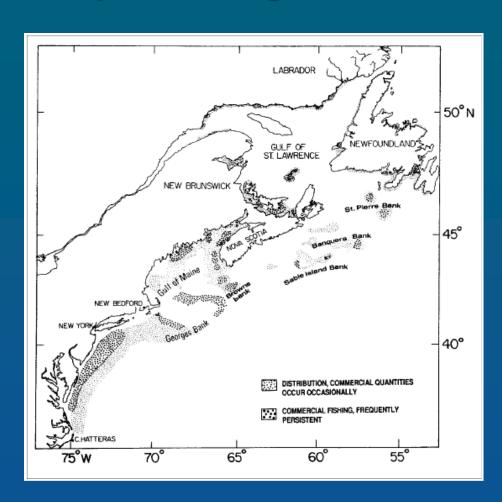
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Scallop Research Share Day May 5, 2022



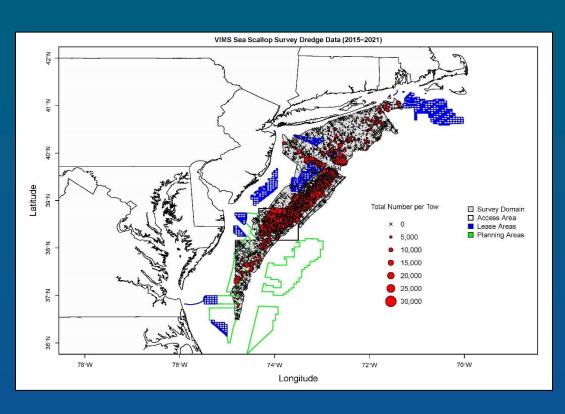
The sea scallop, Placopecten magellanicus

- ·Spatial distribution is mediated by temperature. As a result, scallops are found farther offshore as a function of decreasing latitude
- ·Supports commercial fisheries throughout its range from Canadian Maritimes to Virginia Capes.
- · Environmental and anthropogenic factors may serve to radically alter the footprint of the fishery.





The sea scallop resource: A changing footprint



- The footprint of the resource is changing.
 - Warming ocean
 - Changing oceanography
 - Disease/parasites
 - OSW development
- In aggregate, the outlook appears to point to lower resource levels and potentially less access to remaining areas.
- What to do? Can we do more with less?



Can we do more with less?

Lessons from Hokkaido



- Japan is a huge producer of scallops (Patinopecten yessoensis) that range from 400-600,000 mt annually.
- The fishery started as a wild capture fishery but moved to a ranching type approach in the 1960's
 - Wild spat collection, intermediate culture and bottom sowing
- Based on the cooperative organizational structure.
- Can any of these approaches be used in the U.S. to stabilize and enhance our resource?



Workshop on the State of Knowledge Related to Scallop Enhancement



Objective

To convene a workshop with sea scallop stakeholders and scallop enhancement experts to synthesize the state of knowledge as it relates to scallop enhancement and explore how scallop enhancement relates to the U.S. East Coast sea scallop resource.



Workshop on the State of Knowledge Related to Scallop Enhancement-Focal Areas

- 1. Potential needs for sea scallop enhancement on the U.S. East Coast;
- 2. Understanding and developing tools to increase and/or improve spat collection, grow out of juvenile scallops, survival of juvenile scallops, and predation impacts;
- 3. Enhancement site location, selection, and monitoring for both inshore and offshore seeding and aquaculture efforts;
- 4. Transportation methods for enhancement studies and efforts;
- 5. Developing advice for standards and best practices for scallop enhancement and aquaculture efforts;
- 6. Discussion of the economic feasibility of enhancement efforts;
- 7. Impacts/implications for the wild caught sea scallop fishery; and
- 8. Policy implications.



Workshop on the State of Knowledge Related to Scallop Enhancement-Deliverables & Next Steps

Deliverables

- 1. A conference proceedings document summarizing the workshop.
- 2. A whitepaper articulating the strengths, weaknesses, opportunities, and threats of scallop enhancement for the U.S. federal fishery for *Placopecten magellanicus*.
- 3. Exploration of a special thematic issue in a relevant peer reviewed journal (e.g. Journal of Shellfish Research, AFS Journal) to document relevant research findings from the workshop across the varied topical areas.

Next Steps

- 1. Establish workshop steering committee (July).
- 2. Conference planning to follow.



Concluding thoughts

- Sea scallops are facing a myriad of environmental and anthropogenic stressors that may reduce the footprint of the resource in U.S. waters.
- Acknowledging the existing expertise and long-running efforts with sea scallop culture and enhancement in the U.S., we look to leverage that experience and engage with domestic and international colleagues to build out our understanding of the state of knowledge of enhancement.
- Ultimately, an output of this effort would be to produce an informed roadmap to guide future efforts in the area of scallop enhancement for the U.S. resource/fishery.

