



Science Center for Marine Fisheries (SCEMFIS) (Phase III)

Science and industry working together for sustainable fisheries

<https://scemfis.org>

NSF Industry-University Cooperative Research Center (I/UCRC)



Eric Powell, Center Director
Roger Mann, Site Director



SCEMFIS Mission: to provide academic research products essential for the sustainable management of shellfish and finfish resources

- **SCEMFIS utilizes academic, recreational and commercial fishery resources to address presently urgent and emerging scientific problems that could limit sustainable fisheries.**
- **SCEMFIS provides academic research products with a goal of enhancing efficient management of shellfish and finfish resources.**
- **SCEMFIS provides scientific research products essential in enhancing awareness of the health benefits of sustainable seafood as well as increasing opportunities for valued growth within seafood business sectors.**



Science Center for Marine Fisheries (SCMFIS)

2024/2025 Research Partners

Mississippi Polymer Institute

Rutgers University

Stove Boat Communications

NOAA/NMFS NEFSC and SEFSC

The University of Southern Mississippi

University of Maryland Center for Env. Science

University of Maryland Eastern Shore

University of Texas at Austin

Virginia Institute of Marine Science

Virginia Tech

William & Mary

Woods Hole Oceanographic Institute



Center Members

Atlantic Marine Processors & Harvesters Association (AMPHA)

Atlantic Capes Fisheries Inc

Bumble Bee Foods, LLC

Community Offshore Wind, RWE

Daybrook Fisheries

LaMonica Fine Foods. Inc.

Lund's Fisheries, Inc.

NEFSC- NOAA NMFS

NFI Scientific Monitoring

Omega Protein

Sea Watch International, Ltd.

Surfside Foods

Westbank Fishing, LLC



NFI Scientific Monitoring Committee



WESTBANK FISHING, LLC



'24/'25 SCEMFIS Overview

- ❑ Total annual member dollars **\$500,000** (full membership: \$62,500/year | secondary membership: \$31,250/year)
- ❑ Total number of research projects supported: **13**
- ❑ Total number of faculties involved: **26 PI or Co-PIs** from **8 universities, 1 agency, & 1 private firm**
- ❑ Total number of graduate & undergraduate students directly involved: **13**
- ❑ NSF INTERNS: **3** graduate students assisted by **3** industry and federal partner facilities
- ❑ Leveraged NSF REU funding to train **7 undergraduates** from **3 universities** in fisheries science
- ❑ Research funding total **\$338,383** 2024-Spring 2025

SCEMFIS Research

- ✓ Developing new techniques for determining age of ocean quahogs with AI saving time & money
- ✓ Improvement of shellfish dredge design and manifold for cost savings
- ✓ Innovative metabarcoding gut content of predator species using gene sequencing
- ✓ New ability to calculate industry-sector carbon intensity with dashboard tool
- ✓ Economic calculation of hatchery and clam nursery siting within geographic area
- ✓ Developed tool to show temporal & geographic climate effects on multiple species for future business planning
- ✓ Benefits of iodine & essential minerals from shellfish consumption missing in world food supply



Gee Whiz Fact: Ocean quahog age compared to world history

