



University of Georgia Marine Extension Service Brunswick Station - Fact Sheet

Mission Statement: The University of Georgia Marine Extension Service (MAREX) conducts outreach education and research to enhance coastal environmental and economic sustainability.

Vision Statement: The Marine Extension Service strives to be the state's lead outreach organization for Georgia's coast. MAREX promotes coastal ecosystem stewardship and fosters understanding of the coastal environment and its sustainability through education and research. MAREX identifies the needs of coastal users to enhance the compatibility of resource use among existing marine industries, businesses, regulators, and stakeholders.

MAREX Goals

1. Collaborate with state, federal and local agencies, academic units, NGOs, and coastal stakeholders.
2. Implement community outreach and technology transfer components in each program area.
3. Collect and integrate long-term coastal water quality data for the development of predictive coastal models to communicate sound science to decision makers and the public.
4. Collect and disseminate sound scientific and technical information to fishery user groups, academia, and government agencies to promote environmental and economic sustainability.
5. Provide seafood safety information and training to industry, regulators, healthcare professionals and the public.
6. Provide technical assistance to promote economic viability and regulatory compliance for marine businesses.
7. Develop and implement land use strategies to reduce nonpoint source water pollution.

Brunswick Programs

MAREX and The Georgia Sea Grant Marine Advisory Service (MAS) work hand-in-hand to serve Georgia's marine related industries. MAREX and MAS specialists concentrate their efforts in seven major program areas: seafood technology, commercial fisheries, recreational fisheries, marine business, coastal ecosystem stewardship, aquaculture, coastal water quality, and smart growth through Nonpoint Education for Municipal Officials, NEMO. The center transfers technology, provides education and training, and conducts applied research.

Through its three programmatic areas of applied research, education, and outreach, the Marine Extension Service serves a diverse coastal constituency. It educates

student and adult groups about Georgia's marine resources, and the importance of being good environmental stewards. It provides assistance to marine industries by finding ways to increase their efficiency and effectiveness, and encourages the development of new industries that do not degrade the environment. It identifies issues and problems that limit the coastal economy and addresses those it can. Those it cannot are directed to appropriate researchers on the main campus. In this sense, the Marine Extension Service provides a vital conduit between the University and Georgia's coastal community.

The Brunswick Center is located on a three-acre site with 300 feet of frontage on the Brunswick River. Commercial shrimp docks and packinghouses are close to the waterfront facility. The 16,300 sq. ft. Brunswick Center facility includes: classrooms; offices; a lecture hall; a seafood technology laboratory; water quality, microbiological and chemical laboratories; a seafood processing pilot plant built to USDA standards; a seafood sanitation training facility; a net loft; a recirculating seawater crab shedding facility; a video editing suite; and two warehouses.

Specialized analytical equipment available for laboratory and fieldwork include: (1) Zellweger Analytics' Lachat QuikChem 8000 flow injection auto analysis system, (2) Tekmar Dohrmann's Apollo 9000 TOC/TN auto analysis system, (3) Turner Designs' 10-AU Field Fluorometer, (4) International Light's IL1700 Radiometer/Photometer, (5) 3 upward looking doppler SonTek 1ADP-3100 current meters, (6) Hydrolab Datasonde 4a and 5x recorders, (7), PerkinElmer Series 200 High Pressure Liquid Chromatograph (HPLC) with Fluorescence and UV/VIS Detectors, (8) PerkinElmer TurboMass Gold GC/MS (GC with FID or Flame Ionization Detector), (9) PerkinElmer ELAN DRCII ICP-MS and (10) a Konelab Aquakem 200 Photometric Analyzer.

MAREX has interactive distance learning facilities at the Brunswick and Skidaway coastal stations and access to those facilities at the School of Marine Programs in Athens. The sites can tie into locations with satellite uplink capabilities for regional or national presentations.

MAREX/MAS augmented its video production and distance learning capabilities with the purchase of professional video production and editing equipment that includes a Sony Color Video Printer, a complete Sony Video Production System, and a MacIntosh digital video editing system. MAREX/MAS purchased Hi8mm, BetacamSP cameras, digital video cameras and computer controlled audio and video recording and editing equipment. This equipment is used to document fish behavior in and around turtle excluder devices (TEDs), bycatch reduction devices (BRDs), and other experimental fishing gear.

MAREX operates the *R/V Georgia Bulldog*, a 73-ft shrimp boat converted into a multipurpose fishery research vessel. The *Bulldog* is capable of bottom and surface long-line fishing, hook and line fishing, deep-sea trap fishing, offshore stern trawling, and double rig shrimp trawling. Modern electronic equipment includes radar, loran, GPS, sonar, side-scan sonar, a Scanmar trawl mensuration system, a NetMind Trawl Monitoring System and state-of-the-art real-time underwater video monitoring and recording equipment. The boat serves as both a research platform and as an education-outreach facility. Crewmembers routinely maintain radio communication with nearby commercial boats working the same fishing grounds to provide real-time information on gear research and catch data. The *Bulldog* gives the Georgia MAS program a unique character. Three smaller powered vessels, a 23-foot Sea Ox with a forward cabin, a 21-

foot Carolina Skiff, and a 25-foot C-Hawk with cabin are available for water quality and inshore fishery research projects. Shallow water sampling can be accomplished through both a one and two-person kayak and five canoes. Available vehicles include three pickup trucks, two 11-passenger vans, a Suburban, and a station wagon. Material handling is aided by a 2.2 ton forklift and a 2 ton Grove Stevedore. Please contact:

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