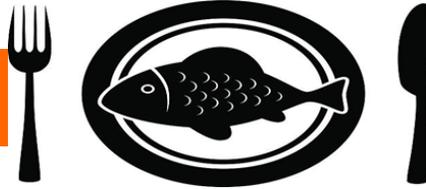


Aquaculture & Fisheries Business Institute

AFBI



AFBI



CAPABILITY STATEMENT

Auburn University's Board of Trustees chartered the Aquaculture and Fisheries Business Institute (AFBI) in 2012. It was created to address the global trends of rapidly expanding world demand for wholesome food protein, growing limitations of arable land and water resources, as well as declining stocks of commercially wild-caught fish.

We believe improved large-scale, commercial aquaculture businesses and resulting multi-dimensional fish/seafood production and its associated value stream is vital to feed the increasing world population. We also believe that research must be focused, applied and timely to produce solutions that will assist aquaculture producers, processors and supply chain members to be successful in the business world. Connecting and bringing synergy to these groups is an essential goal of AFBI.

AFBI is an aquaculture business solutions platform that links multidisciplinary university resources and world class research with industry collaborators to answer bio-technical, policy, economic and business questions.

We do this by:

- Delivering new aquaculture production and nutrition systems that improve efficiencies and profitability in an environmentally responsible manner.
- Promoting fish health by delivering proactive solutions to disease and biosecurity threats.
- Delivering genetic and hybrid advances that improve production efficiencies.
- Creating new domestic and export market linkages for US products.
- Monitoring and interpreting external trends that affect US and global aquaculture.
- Hosting forums that identify aquaculture issues and opportunities toward producing highly focused inquiry and research efforts to achieve specific business opportunities and objectives.
- Delivering specialized training and professional development certification programs.

At AFBI, we believe US aquaculture producers can compete globally, but only with enhanced inventory control, feed efficiency and greater production efficiencies with strict product quality and consistency standards. The volume of high quality water available in the southeast US coupled with its favorable climate can support a thriving multi-billion dollar domestic seafood industry by 2040.

We can provide insight and innovation to help aquaculture and fishery businesses manage change and opportunity profitably and effectively. We are committed to synergistic linkages with industry collaborators for solving applied aquaculture and fishery industry problems and identifying new opportunities for business growth.



“It is important to foster a sustainable aquaculture industry in the United States to support nutritional security and job creation in rural America.” Sonny Ramaswamy, NIFA Director

AFBI was created in response to the global trends of rapidly expanding world demand for protein, limitations on arable land and water, and declining stocks of commercial wild-caught fish.

We believe large-scale, commercial aquaculture businesses and resulting fish/seafood production is vital to feed the increasing world population. We also believe that research must be applied and timely to produce solutions that will assist aquaculture



RESEARCH ACTIVITIES

Some of the world’s best Aquaculture research facilities are available to the AFBI through physical resources of the Auburn University School of Fisheries, Aquaculture and Aquatic Sciences (SFAAS), such as ponds, labs, greenhouses and expertise.

Here are some of our current research projects:

- **Integrated Plant-Fish-Energy Greenhouses** -Through the AU SFAAS, AFBI is concentrating research in new areas of potential aquaculture development. One such area is aquaponics, where fish are grown in an intensive greenhouse facility, dissolved and solid fish wastes are collected and used in plant greenhouses, raised beds and raceways to grow several different types of vegetables, flowering plants, algae, biogas and plastic precursor products. Supported by USDA-NIFA, Alabama Agricultural Experiment Station (AAES), AU Campus Dining, and USDA Hatch.
- **In-Pond Raceway Systems (IPRS)** -This project conducts research in four one-acre ponds to test and verify these intensive fish production systems biologically, chemically and economically. Hybrid catfish grown in IPRS doubled production rates in commercial pond culture. Supported by Alabama Catfish Producers (ACP), Alabama Cooperative Extension System (ACES), AAES, and USDA Hatch.
- **Aeromonas Trials in West AL** - Virulent *Aeromonas hydrophila* is a serious catfish disease problem in the farm-raised catfish industry. On-farm research is being conducted at a commercial catfish farm to test viable vaccine solutions to mitigate this problem. Supported by ACP, Alabama Department of Agriculture and Industries, Alabama Catfish Feed Mill, Alabama Innovation Fund, Southern Regional Aquaculture Center, USDA-ARS, Alabama Farming Center, ACES, AAES, and USDA Hatch.
- **Fish Growth and Manure Collection Project** - IPRS represents an evolving technology that allows more control of the fish, water quality and the harvest. AFBI is finding ways to improve water quality by developing solid waste (manure) collection systems. The nutrient-rich manure can be used for a variety of purposes, but the end result is the improvement of the water quality so more fish can be grown in the same area at lower cost. Supported by United Soybean Board, ACES, AAES, and USDA Hatch.

AREAS OF EXPERTISE

Among our group of scientists and industry collaborators, our expertise ranges from animal health enhancement, genetic improvement of stocks, aquatic animal nutrition, and integrated multi-dimensional production systems. These systems are focused on high performance across all elements and training for management, in a world that requires much more production with reduced resource inputs. Further, in a diet and public health arena, we have experts in food quality and food microbiology to assure wholesome products reach consumers.

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