REQUEST FOR PRE-PROPOSALS

Please Copy and Distribute to All Interested Parties

The USDA-NIFA Southern Regional Aquaculture Center solicits response from qualified multi-state teams interested in participating in the regional project:

MANAGEMENT OF HYBRID CATFISH FOODFISH PRODUCTION

SRAC’s Board of Directors has authorized up to $300,000 for a 2-year project to evaluate production methods that will provide year-round availability of hybrid catfish food fish while reducing size variation at harvest. This project will be developed using the “competitive proposal method” where a team of multi-state scientists having demonstrated records of expertise in the subject complete a single pre-proposal that addresses all project objectives. One proposal will be selected for funding based on review by a committee of scientists not involved in any of the proposals that are submitted.

Background

Commercial production of channel catfish × blue catfish hybrid foodfish has increased substantially over the last 5 years due to the hybrid’s superior growth, survival, and processing yield compared to channel catfish. Currently most producers are rearing hybrids in single-batch intensive production systems (intensively-aerated smaller commercial ponds, split ponds, or in-pond raceways). Due to high processor demand, few if any market-size hybrids are held on-farm through the winter and into the following growing season. This has been a profitable management strategy for producers, but if the hybrid’s market share continues to increase (from an estimated 30% of food fish processed now) as is expected, hybrid producers will have to gradually shift to year-round production strategies.

The mixed-batch production methods that are used to grow food size channel catfish year round, appear less suitable for hybrid catfish. Hybrids do not sock grade as well as channel catfish and they are more susceptible to handling stress when water temperatures are warm. If hybrid producers are required to produce food fish for the processors year-round, then production strategies to allow year-round harvest and their associated costs need to be developed and evaluated. Currently, the economics of these various strategies are unknown.

Hybrid producers need demonstrated production options to produce a more uniform crop. Single-batch hybrid production often results in a large size variation at harvest. It is not unusual to have ¼ pound fish and 5 pound fish in a hybrid harvest that averages 1.25 to 2.0 pounds/fish. This is not as common with channel catfish since they grow slower and are “topped off” several times a year. While some processors need this large size range in order to meet customers’ demands, this is not always the case.

Objectives

1) Evaluate production methods that will provide year-round availability of hybrid catfish food fish, and determine the resulting cost of production.
2) Evaluate management techniques that will reduce the size variation of hybrid catfish food fish, determining impacts of these techniques on net production and production costs.
Experimental Approach

Proposals should focus on practical techniques that will increase the year-round supply of hybrid catfish food fish (Objective 1) and those that may reduce the number of very large fish that would otherwise be produced (Objective 2).

Pre-proposals should include a list of intended commercial collaborators and a brief description of their facilities. Preference will be given to approaches that assure success based on previous research and experience and the availability of existing commercial-scale production systems. Primary consideration will be given to proposals that address the development of a common and standardized economic analysis approach toward estimation of production costs for these proposed management techniques. Annual fixed costs should include (but are not limited to) depreciation, interest on investment, and insurance. Variable costs should also include (but are not limited to) chemicals, feed, fingerlings, fuel, interest on operating capital, labor, repair and maintenance, and utilities.

Consideration will be given only to those approaches that show promise of success based on investigator experience and availability of equipment and facilities for conducting proposed work. Field studies should be conducted under commercial aquaculture conditions. Priority will be given to adequately replicated field studies and those conducted in collaboration with commercial farms. Criteria for evaluation of research results should show evidence of consultation with an economist. Cooperative efforts among institutions/agencies are encouraged while duplication of effort and overlap with existing projects should be avoided.

How to Respond

Pre-proposals must address both objectives. Preference will be given to pre-proposals that show a high degree of collaboration and coordination among participants. To meet the criterion for a regional project, the pre-proposal must include collaboration from scientists in two or more states or territories in the Southern Region (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, U.S. Virgin Islands, and Virginia).

The pre-proposal must include a one page vita for each participant and a proposed budget for each participating institution or organization. Pre-proposals, vitae, and budgets that are not in the proper format will not be considered. The Guidelines for Writing a SRAC Pre-proposal (Competitive Proposal Approach) and an example of a pre-proposal is attached. Contact Kristen Walters at 662-686-3269 for any assistance.

Send an electronic copy of the pre-proposal in Word format to Jimmy Avery, SRAC Director as an email attachment (javery@drec.msstate.edu) by July 15, 2014. Proposals received after that date will not be considered.