From: dboozer1@aol.com <dboozer1@aol.com>
Sent: Friday, September 14, 2018 10:17 AM

To: Gene Kim - NIFA <Gene.W.Kim@nifa.usda.gov>; Rexroad, III, Caird

<Caird.RexroadIII@ARS.USDA.GOV>

**Cc:** Charlie.Culpepper@freshfromflorida.com; naa@thenaa.net;

coolfish@GoldenPondTropicals.net;

cawatson@ufl.edu

David Boozer/FTFFA

## **Subject:** TROPICAL FISH RESEARCH PRIORITIES

Paul Zajicek, with the National Aquaculture Association, contacted me and said that the USDA has not received any input on the research needs of US tropical fish industry. The Florida Tropical Fish Farms Association has a research committee of 12 tropical fish producers and below is our list of research projects priorities the we feel are most needed for our industry to expand and be competitive with foreign imports. We would appreciate it if you would consider incorporating them into the USDA list of future research projects that might be eligible for federal funding. If I can be of further assistance please don't hesitate to contact me.

## TROPICAL FISH RESEARCH PRIORITIES

Determine ornamental fish and invertebrate species reproduction and grow-out characteristics of priority species identified by the Florida Tropical Fish Farms Association.

Develop or compare methods to estimate shrimp or fish numbers or biomass in ponds.

Masculinize (improve color and/or finnage) ornamental fish through approved chemical or environmental treatments.

Achieve the labeling of a chemical pond treatment to eliminate predacious zooplankton.

Increase on-farm productivity and efficiencies by identifying and testing technology to reduce production costs.

Investigate Integrated Aquaculture Systems (IAS) and Integrated Multi-Trophic Aquaculture (IMTA) to improve recirculating aquaculture system economics.

Develop procedures or protocols for disinfecting live feeds.

Identify and develop diagnostic tools, potential treatment and prevention options, and biosecurity measures for emerging diseases of aquaculture species; or improve on diagnostic tools, treatment and prevention, and biosecurity for existing known diseases.

Investigate methods to control microbial communities in aquaculture hatcheries and larval rearing systems.

Develop or improve live feed species and production protocols for marine and freshwater aquaculture species. Evaluate alternative feed ingredients and dietary formulations to reduce feed costs and increase growth and reproduction of Florida aquaculture species.

Conduct a science-based risk analysis (assessment and management) of non-native species that informs responsible cultivation.

Quantify disturbed and undisturbed habitat biotic and abiotic resistance to non-native species introduction.