

USDA Aquaculture General Aquaculture Stakeholder Listening Session

August 14, 2018

1:00 pm – 4:00 pm EDT

Notes

Co-Hosts:

- Gene Kim, USDA National Institute of Food and Agriculture, National Program Leader, Aquaculture
- Caird Rexroad, III, USDA Agricultural Research Service, National Program Leader, Aquaculture

Guest Speaker, Cheng-Sheng Lee, Executive Director, Center for Tropical and Subtropical Aquaculture

26 attendees: producers, industry, academia, federal, and ARS scientists

**Genetics, Breeding and Broodstock:**

- Research on reproduction - quantity and quality of eggs for marine fish.
- Increase survivability of early life stage animals.

**Fish Health:**

- Effects of cyanobacteria blooms/cyanobacteria, on animal health and any toxins residuals in products that are sold.
- Research on new harmful algal blooms (e.g. pico HABs).
- Need vaccines, especially for marine species – specifically against Amyloodinium.
- Vaccine development is far behind, need to explore methods to provide efficacy of vaccines to small animals in a high population.
- Vaccines and delivery systems for alligators, such as West Nile virus, right now two injections 6 weeks apart. There is a need for a better vaccine delivery system.
- White spot disease on crawfish farms is an issue; typically seen in shrimp. Not sure how it gets there, prevalent in ~10% of ponds. Need research on the route of transmission (how does it get into the ponds?)

**Nutrition:**

- Nutrition by species – better define nutrient requirements.
- Practical feed development to achieve commercializable feeds; for alternative species.
- As whisky and fuel industries evolve, co-products are also evolving. Now getting high protein and oil products, interested in research that uses these co-products in fish feeds, from carnivores to omnivores.

**Production Systems:**

- Company is working on large scale development of Recirculating Aquaculture Systems (RAS) for fresh and salt water systems developed in Europe. These technologies are new to the United States. Interested in more research and development of these technologies.
- Small ponds - recreational ponds, 2 acres or less, need to do some updated water quality work that Claud Boyd did in 1970s. SE Louisiana different from Alabama. There are many products that claim to improve pond water quality, but do they work? Do they clear up ponds? These ponds do not produce a product, but they are recreational and therefore impact the economy.

- Need water quality research to update knowledge on management of small ponds in Louisiana (half to 2 acres ponds), especially as it relates to fertilization effectiveness in different soils, aquatic weeds, etc.
- Need assessment of enzymes and additives to ponds- how effective is it in small ponds.

**Additional Priorities:**

- Interested in research that supports organic standards for aquaculture.
- Interested in learning more about how to collaborate.
- International collaborations to help capacity in the United States.
- Need models or data that help profitability, economics research.

**LIST OF WEBINAR ATTENDEES:**

<b>Name</b>	<b>Affiliation</b>
Amanda Wenczel	New Jersey Department of Agriculture
Ashley Eagle-Gibbs	Environmental Action Committee of Maine
Catherine Purcell	National Oceanic and Atmospheric Administration
Charles Blumenschein	Veolia Water Technologies
Charlie Culpepper	Florida Department of Agriculture and Consumer Services
Dave Straus	USDA Agricultural Research Service
Jeff Milton	Alaska Department of Fish and Game
Jesse Trushenski	Evaqua Farms
Jessica Fox	RALCO
Joe Morris	Iowa State University
Johan Andreassen	Atlantic Sapphire
John Dentler	Hendrix Genetics
Kathleen Hartman	USDA Animal and Plant Health Inspection Service
L. Feinberg	KnipBio
Kristen Gruenthal	National Oceanic and Atmospheric Administration
Kurt Rosentrater	Distillers Grains Technology Council
Leroy Creswell	University of Florida
Maggie Ma	Hawaii Pacific University
Margaret Parker	USDA Animal and Plant Health Inspection Service
Mark Shirley	Louisiana State University
Mike Rust	National Oceanic and Atmospheric Administration
Nicole Kirchhoff	Live Advantage Bait, LLC
Peter Bechtel	USDA Agricultural Research Service
Portia Sapp	Florida Department of Agriculture and Consumer Services
Scott Snyder	Zeigler Bros., Inc.
Warren Hess	American Veterinary Medical Association