

Catfish Stakeholder Listening Session
Alabama Fish Farming Center, Greensboro, AL
July 31, 2018
Notes

Co-Hosts:

- USDA Agricultural Research Service and USDA National Institute of Food and Agriculture

34 attendees: catfish producers and processors; faculty from Auburn University; and researchers from the ARS Aquatic Animal Health Research laboratory – see list

Genetics, Breeding and Broodstock:

- Genetic research to enhance selection for survival and disease resistance.

Fish Health:

- Continue Aeromonas work-biggest problem for the Catfish industry.
- Columnaris is still an important disease. Recently, farmers are seeing it with some regularity in the summer. Need vaccine development.
- Need research on alternatives to antibiotics.

Nutrition:

- Feed additives to improve health, e.g., feeding catfish feeds containing fish meal during Aeromonas outbreaks reduces the number of mortalities.
- Fishmeal-added feed. Does it work well? What is the value in earlier adoption to get ahead of and prevent disease issues?

Quality:

- Given that many issues ultimately tie back to consumer demand, there is a need for market research to increase demand. What are the economics of different products?
- Develop new value-added products (e.g., strips, fish sticks, loins, smoked), regardless of size of catfish, but may be helpful for large catfish.
- Marketing research for new catfish products.
- How to navigate the FSIS inspection of catfish to produce value-added products.
- Transportation issues, haulers handle different species (e.g., baitfish not intended for food supply) and use chemicals, what are the residues?

Water Quality:

- Toxic algal blooms is big issue that causes losses, including losses of valuable market-size fish.
- Toxicology of algae blooms. What is the mode of action for the toxin to kill the fish?
- Need method to identify toxins in the pond water; Need for quantification test to measure the toxin in the water, need diagnostics.
- Need research on dosage requirements for chemicals that are available to treat toxic algae, chemicals are expensive.
- Need to better understand algae dynamics, including environmental factors that increase toxicity. What causes the releases of toxins? Is it the biology of the pond? For example, how do different chemical controls or different treatment schedules (i.e., different quantity and

duration of application) affect algae dynamics? Can we better manage algae dynamics before fish start to die?

- Ammonia is an issue, potential for hybrids in particular. Are hybrids more susceptible to water quality issues than channel catfish?

Production Management:

- Big fish issue (value of fish decreases as fish grow too large for processors' demand). What to do with large catfish?
- What factors cause persistence of large catfish in west AL and east MS ponds (i.e., harvesting, seining, management, pond design)?
- Seining technology or management improvements to prevent large catfish remaining in ponds (seining efficiency, pond design).
- Big fish increase the likelihood of off-flavor.
- Hybrids have increased supply of big fish from 15% to 30%, Hybrids are great for marketing, bad for production.
- Need data on bird predation on production catfish ponds in west Alabama and east Mississippi. Unlike the Delta region, where we have lots of data, data are lacking for west AL and east MS, where pelicans are now an issue, as well as cormorants).
- Impacts of disease, how birds transfer disease between farms.
- Need info on the life cycle of snails and their hosts, roosting sites.
- Alternative species need to be explored, especially high-value species. For example, paddlefish or other planktivores to graze down algae and provide caviar product.
- Need new compounds available for catfish production – for algae treatment and new antibiotic such as a floating terramycin for columnaris.
- As for animal welfare, it is on the horizon, but there are more pressing threats to catfish aquaculture, presently.

Research Capacity (Local/Alabama):

- There is demand for Auburn/ARS presence in West Alabama (i.e., fish farming station) in order to be more responsive to catfish issues.
- There is a need for closer interactions between producers/processors in west Alabama and researchers at ARS and Auburn.
- There are potential technological ways to keep researchers aware of production issues in real time that should be explored (e.g., app to connect researchers to production).
- Researchers – producer connections work best in face-to-face interactions, which can occur best if there is a local physical presence.
- There is a need for staff presence, students, and faculty presence in West Alabama
- Potential for the Stoneville model for co-located infrastructure and personnel.
- Auburn faculty and ARS scientists are being responsive, but the distance prevents easy interaction and real-time updates on the catfish industry issues.
- Suggest a west AL fish station would be a cooperative effort between Auburn and ARS, perhaps at the Black Belt Research and Extension Center in Marion Junction

LIST OF WEBINAR ATTENDEES

Name	Affiliation
Allen Davis	Auburn University
Ashley Kyser	Kyser Family Farms
Ben Beck	USDA Agricultural Research Service
Ben LaFrentz	USDA Agricultural Research Service
Brad Ballard	North River Farm
Bubba Drury	Drury Catfish
Byron Watson	B&J Catfish
Caird Rexroad	USDA Agricultural Research Service
Corey Henderson	AFFC/Auburn University
Covadonga Arias	Auburn University
Craig Shoemaker	USDA Agricultural Research Service
Dahai Xu	USDA Agricultural Research Service
David Greene	South Fresh
Derry Bowe	Pearce Catfish
Devon Miller	Farmer/South Fresh
Dickie Odom	Odom Farm
Dunhua Zhang	USDA Agricultural Research Service
Eric Peatman	Auburn University
Gabe Holdeman	Add-IT Enterprise LLC
Gregory Whitis	AFFC Auburn University
James Walker	
Jessee Chappell	Auburn University
Johnny Shelley	USDA Agricultural Research Service
Lisa Bott	South Fresh
Luke Roy	AFFC/Auburn University
M.H. Walker	ALFA
Mike Owens	Harvest Select
Peter Niehoff	Elysiion Farms
Tom Houston	Harvest Select
Townsend Kyser	Kyser Family Farms
Troy Bader	USDA Agricultural Research Service
Troy Hanson	Auburn University - Fisheries
Vaughn Koel	SouthFresh Farms
Willard Powe	Dean Wilson Farms