Georgia Commercial Aquaculture Update 2010

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Major Changes

• Catfish processors looking for fish
  – Catfish prices increase during 2010

• Some ponds put back into production in 2010

• Feed prices remain high
  – Corn and soybean prices and energy costs

• Sportfish hatcheries suffer a drought cycle
  – Expect a rebound in 2011 after rains fill ponds
Catfish processing

- Bainbridge plant expands
- Consumers are quality conscious
- Marketing changes are needed in the industry
- Tariff applied to Asian catfish
- Shortage of catfish in U.S. will keep prices above $.80 per pound for awhile
Marketing Aquaculture Products

• Develop and maintain a STRICT quality policy
• Emphasize freshness even when selling frozen product
• Monitor chemicals in your product
  – Laboratory testing
  – HACCP documentation
• No off-flavor allowed!
Processing Competition

• Chinese fish continue to take about 20% of the catfish market and most of the tilapia market
• Poultry, pork and beef prices expected to rise
• Heaviest competition in the fillet market
• Shrimp prices still very low
Catfish Acreage

- Down
- Price up to $0.80 on average, $1.05 in South Georgia (held down by Delta prices)
- Range in Alabama from $0.68 to 0.90 per pound at the pond
- About 200 acres put back into production in 2010 to 2011 in Georgia
Imports

- Still rising
- Mostly not Ictalurus species
- (Channel catfish about 2 million pounds per month)
- Imports will rise as U.S. catfish price rises
- The import duties are a major factor in keeping import volume down
Quality Factors

• 18 of 26 samples of Chinese catfish had illegal chemicals
• Processors take steps to analyze their catfish
• This is very important to keep U.S. catfish competitive
• Import quality will cost them and increase their price reducing pressure on U.S. production
Higher Feed Costs

Catfish need pellets most of the production cycle. Grain and oilseed prices double in 2010. Energy to pellet and ship feed is about 50% of cost.
## Feed cost vs. Breakeven

<table>
<thead>
<tr>
<th>Price per pound needed</th>
<th>$380 per ton</th>
<th>$0.97</th>
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<tbody>
<tr>
<td>$400 per ton</td>
<td>$1.00</td>
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- Alabama, Mississippi and Arkansas prices are lower than those in Georgia.
- Feed in Georgia adds $60-80 or more per ton for transportation from AL or MS.
Processors vs. Fish Price

• Break even average processed price
  • At $0.80 per pound = $2.76
  • At $1.00 per pound = $3.20

Based on bone in or whole portion dressed catfish. Next level usually adds 40% to processor prices ($3.86 to $4.48). Higher catfish prices encourage imports and make US catfish less competitive.
Projected Corn prices (Iowa State)

- 2008 $3.40
- 2009 to 2010 $3.40
- 2016 $3.15

These prices were shown to be incorrect in 2010 as corn prices reached $6.55 per bushel (Atlanta).

Corn to ethanol increases when crude oil is above $90 per barrel.
Soybean Prices

- Currently about **$13.00 per bushel**
- As low as **$9.00 per bushel during 2009**
- Soybean meal **$370 to $406 during 2010**

- Ethanol and biodiesel are projected to triple in sales by 2020 (Pike Research, Boulder, CO)
- Hopeful for alternatives other than grains
Distillers Grains

• A bushel of corn yields 16 pounds of DDG, 2.8 gal ethanol
• In 2006, 12 million metric tons of DDG were produced
• In 2016, 68 million metric tons of DDG are projected
• In 2008/09 140 million tons of corn was used for feed (-3 million tons 2010)
Catfish Feed Changes

• Arkansas formula
  Corn gluten, less soybean meal
• Georgia formula
  Brewers grains or distillers grains,
  Less soybean meal and corn
• Peanut meal
  » Or more Meat and Bone Meal
Feed manufacturing concept changes

- Consider using sinking pellet instead of extruded (less energy, okay for low corn feed formulas)
- Reducing corn allows better digestibility without extra heat
- Use moist ingredients (wet brewers grains or wet distillers grains)
The Key to Feed Ingredient substitution

- LOCAL AVAILABILITY
- Transportation Costs
- All ingredients are priced based on corn/soybean price
- Need to be very digestible
National Effort

• Looking for new protein sources for Aquaculture Feeds
• Everything is on the table
• See:
Sportfish in Georgia

• Largemouth bass
  – Improved strains
• Bream
  – Hybrids
  – Bluegill
  – Red ear
• Grass carp
• Crappie
Sportfish Needs

• Bass hatcheries
  – Producing fast growing easy-to-catch bass

• Food Sized Bream
  – Quality hybrids
  – Reduce time to market size

• Large size baitfish
  – 5 to 6 inch shiners
  – Other fish (trout fingerlings, suckers)
Tilapia producers

- Local market
- Live Market
- Aquaponics
- Backyard culture
Sturgeon in Georgia

- First caviar to be sold from Cohutta
- 50 lbs at $120,000
- After 7 years of maturation
- Beluga Sturgeon
Other species opportunities

- Freshwater drum
- Crawfish
- Blue crab
- Yellow perch
- Flounder