Florida’s Aquaculture

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2003 Sales of Florida Aquaculture

- Tropical Fish: 48%
- Aquatic Plants: 21%
- Clams: 14%
- Shrimp: 5%
- Alligators: 3%
- Catfish: 2%
- Tilapia: 2%
- Other Fish: 3%
- Other Aquatics: 1%
- Live Rock: 1%
2003 Farm Gate Sales of Florida Aquaculture

(Millions)
Farm Gate Sales: Ornamentals

Millions of Dollars

- Live bearers
- Egg Layers
- Total

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<th>Year</th>
<th>Live Bearers</th>
<th>Egg Layers</th>
<th>Total</th>
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Location of Farms
Market Flow Chart for Wild-Caught Fish

Collector — "Consolidator" — Regional Wholesaler

Importer/Transhipper — Wholesaler/Exporter

Wholesaler/Distributor

Retailer — Hobbyist
Freshwater Production

- Involves both tanks and ponds
- Over 800 varieties in production in Florida
- Divided into livebearers and egg-layers
- Many compete with wild-caught equivalents
Aquatic Plant Production

Began with collection from rivers and streams of the State.

Today some 200 species/varieties are in production, using state-of-the-art plant production techniques, including tissue culture and hydroponics.
Marine Ornamental Production

Requires controlled, indoor facilities except for live rock.

Limited to ~ 2 Dozen Species, all with strong parental care, and small spawn size.

Must compete head-on with wild caught specimens.
Live Rock and Open Water Sites

Expanded significantly since ban on wild harvest

Gulf of Mexico and Florida Keys

State and Federal Leases
Fish

- ~ 2 dozen species
- Still mostly substrate-spawners
- Direct to retailer/hobbyist marketing
- Public Aquaria market opening
Invertebrates

- Live Rock still dominates
- “Value Added” Live Rock
- Tank-raised corals (mostly “soft”)
- Tridacna Clams
Changing Market

“Big Box” wholesale/retail concept
Vertical integration of market from producer all the way to retail.
Contract Growing.
Clams
Sturgeon

- 3 main producers in the state, all concentrating on non-native species.
- Long term investment for caviar, but meat from males in one to two year.
- First sales of caviar expected this year.
Shrimp

• One LARGE farm located in south Florida (Oceanboy Farms, Inc.). Raising *P. vannemi* in low salinity ponds.
• Several failures since 1970’s to present day.
• Stiff foreign competition, and fluctuating commodity price.
Channel Catfish

- Primarily limited to the western panhandle region (Escambia County). ~1,000 acres total.
- Facing pressure from Asian imports, but holding their own.
- Other specialty producers for stocking ponds (these producers typically produce numerous species of native fish such as bass, bluegill, etc.)
Marine Finfish

- R&D at present. No commercial activity other than fingerling production.
- Sexy segment of industry due to high retail value, but too high in production costs for Florida producers today.
- Cobia, Amberjack, Snapper, Grouper, Flounder, Black Seabass, etc.
- Regulatory, land, and economic constraints.
Research Needs

- Design criteria for reduction of production costs
- Larval rearing
- Broodstock maturation
- Health and Medicine (especially with invertebrates)
- New Species
- Environmental Issues
Extension Priorities

- Chemical and Pesticide Usage
- Water Quality Management
- Health Management
- System Design
- Reproductive Technologies
- Environmental Issues