Fingerling Procurement

Laura Tiu, Ph.D.
tiu.2@osu.edu
Ohio Center for Aquaculture Research and Development
OSU South Centers
Piketon, OH

Bringing Knowledge to Life
Fingerling Availability/Quality

• Continues to be a bottleneck
  – Fingerlings one of top three expenses
  – Build expense into a business plan
  – Research from the beginning
  – Don’t assume availability
What are you buying?

• All fingerlings are not created equal

• Eggs, fry, fingerling, advanced fingerling
  – Age
    • Big 1 yr old or small 2 yr old
  – Genetics-whose your daddy?
  – Sex- dimorphism
  – Graded – shorts?
Availability

- Availability
  - Spawns/year
  - How many hatcheries
  - Supply and demand (competition with others)
  - Price
  - Numbers
  - Pre-order/deposit
  - Guarantee?
How will you get it?

• Transportation
  – Location of hatcheries
    • Live haulers or brokers
    • Who gets/needs permits/health certificates
  – Receiving
    • Temperature & pH shock
    • Assessing the health
    • How will you hold/grade
    • When do you own the fish
  – When do you pay
    • Paperwork
Yellow Perch

- Fingerlings 40-75% of production costs
- Price around $0.07-$0.15/inch
- High cost/lb of production
  - 4 fingerling/lb product
  - $0.25 x 4 = $1.00 fingerling cost/lb
- 18 months to food size (slow)
  - Over-winter = risk
- Grading
  - Large fish grow faster
  - Smalls don’t catch up
- Sexual dimorphism
- Variable production
  - Last year = early spring, late freeze
- Live feeds needed for indoor
- Year-round spawning experimental
Bluegill/hybrids

– Fingerlings from Arkansas ($0.11 ea, 2.5”) (2009 offspring)

– Group spawning

– Target size ½ lb fish

– 3 fingerlings/lb production
  • 30% mortality
  • $0.11 x 3 = $0.33/lb product

– 18 months production
  • Over winter = fish
  • Larger fingerling doesn’t reach market in one year

– Sexual dimorphism

– All-male populations
Tilapia

- Fingerlings available year-round
- Easily shipped in mail
- Market size is 1.25 – 2.0 lbs.
- Fry cost $0.10-$0.25 each
- Fry cost/lb product = $0.10-0.25
- All males
  - Methyl testosterone
  - Sex reversal
- Small orders available locally
Make your own!

• Vertical integration
  – Available facilities
  – Inputs: labor, time
  – Economy of scale to be economical
  – Broodstock management
  – Genetic impacts (inbreeding/depression)
  – Unpredictable
Form a Cooperative

• Ohio bluegill growers order seed and feed cooperatively
  – Reduces costs
  – Can also lead to marketing opportunities

• Central Ohio Yellow Perch Work Group
  – Three farms in neighboring counties
  – Sell perch fingerlings for pond stocking
Contact Information

Laura Tiu, Aquaculture Specialist

tiu.2@osu.edu

OSU South Centers

1864 Shyville Road
Piketon, OH 45661
740-289-2071
800-297-2072 (Ohio Only)
http://southcenters.osu.edu/aqua