Freshwater Prawn Production in Missouri
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• Goal to help Missouri farmers by promoting value added aquaculture production
• Objective to raise freshwater prawns for subsistence or community enhancement.
• High-value agriculture products, with minimum input cost.
Freshwater Prawn Trial Production at Bradford

- Pond Creation and Preparation
- Stocking
- Feeding
- Predation
- Harvesting and Sales
Challenges and Setbacks

• Environmental issues
  • Lack of supplemental aeration system
• Predation
  • Critters
• Growth Rate
  • Density influenced
• Marketing/Sales
  • ????
Pond Construction and Slope
Preparing Prawn Pond
Initializing Prawn Pond Biologic Process
Stocking Fresh Water Prawns

• Truck delivery (easy)
  – Bio-control concerns
  – Timing issues
  – Equipment issues
Stocking Fresh Water Prawns

- Airline delivery
  - Bio-control issues
  - Over night delivery
  - High cost
  - Ammonia issues
  - Temp acclimation
Rearing Prawns Post Larva to Stocking

- Prawn Nursery Operation
  - Air transport costly
  - Bio-control minimized
  - Stocking at grower convenience
  - Larger size prawn pond stocking
  - Temperature control issues
  - Electrical supply reliability
Feeding: Prawns are scavengers

• Shrimp chow
  – Start out with very little food
  – Increase over time

• Invertebrates
  – Road Kill Baskets

• Dog food
  – High Protein
Predators and Prawns
The Alpha Predator
Capture System for Easy Harvest
Final Collection of Prawns
Prawn Pond After Harvest
Marketing & Processing

• Restaurants only want large prawns
• Fresh product sells; frozen does not sell
• Need to find markets for smaller prawns
• Restaurants need to know how to prepare them.
Prawn Yields and Economics

- 77 to 123 lbs/0.25-acre pond
- 300 to 492 lbs/0.25-acre, 20 count prawns

- Sales price = $7.00/lb
- Investment cost = (excluding time)
  - Pond Construction = $1,200 each
  - Food approximate = $60/season-quarter acre
  - Prawn cost $300/4000 juveniles
Telling the Boss How Much More