

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

