Freshwater Shrimp for Alabama

by

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Freshwater shrimp or Malaysian prawn or *Macrobrachium*, specifically *Macrobrachium rosenbergii*, have been given considerable attention by Alabama newspapers during the past several weeks. Because I have received so many letters and calls on the subject, I thought it would be a good idea to put my thoughts into print.

Let me start by stating my conclusions. Freshwater shrimp will probably never be grown on a large scale in Alabama and, at the present time, it is definitely not a commodity to invest in unless you like expensive hobbies. However, I don't want to burn any bridges because someday researchers may give us an animal and the tools to grow it at a profit.

The reasons that I don't recommend any large-scale investments at this time are:

- temperature intolerance,
- markets,
- cost of production,
- source of post-larvae, and
- ponds

Let's look at each reason briefly.

- **Temperature intolerance** - Freshwater shrimp are tropical crustaceans. They can't tolerate cold and begin to die at 60°F. That means they can't be stocked safely until May and must be harvested by October or sooner in Alabama. The growing season is limited to a maximum of 5 months outdoors.

- **Markets** - The short growing season brings us to a marketing problem. The common way to purchase baby freshwater shrimp is in a stage called post-larvae. When the growing season ends, the post-larvae may have grown to weigh 20 per pound (20 count). This is a marketable size but they look little different from our
• Gulf shrimp being sold in abundant quantities at their lowest prices during that time of year. Therefore, freshwater shrimp must compete with the Gulf shrimp selling retail for $3.00/lb. The pond-grown shrimp cost more to produce and since they aren't particularly identifiable by the consumer at that size or by their taste, their high cost would severely limit sales.

Larger sizes (juveniles) could be stocked with the objective of selling jumbo shrimp. They are identifiable but probably very expensive to stock.

• **Cost of Production** – The cost of producing freshwater shrimp is high. Post-larvae may cost more than $25 per thousand so if you stock 15,000 per acre, aiming at a total production of 750 pounds per acre of 20-count shrimp, the post-larvae will cost $375 per acre. That doesn’t include packaging and air transportation from Hawaii or some other tropical location. The shipping cost is often as much as the cost of post-larvae which would result in a total cost of up to $750 per acre just to stock the small size shrimp to be grown.

• **Source of post-larvae** – At present, there are no hatcheries in the Southeastern United States large enough to supply their own needs and outside markets. Large, commercial hatcheries do exist in Hawaii, the Caribbean and South America but are difficult to communicate with.

• **Ponds** – Much of Alabama is hilly and more than 95% of our ponds are watershed ponds built in the hills. If the “hill ponds” are drained to harvest, which is the best way to catch freshwater shrimp, they must be filled again with water before April or rainfall may be insufficient to fill them any later in the season. The problem that is created is that the longer the ponds are filled before stocking the post-larvae in May, the better chance they will be contaminated with wild fish and insects which eat post-larvae.

In Summary, we’re not now ready to grow freshwater shrimp on a commercial scale in Alabama. There may be some special cases but these would have to be looked at carefully. Freshwater shrimp can be grown as a hobby and/or for home-use.