

U.S. PRODUCTION OF *Macrobrachium* SPECIES



Dr. Benedict (Ben) C. Posadas
Assistant Research Professor of Economics
<http://www.msstate.edu/dept/crec/nre.html>

2/3/2003

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U.S. FWP PRODUCTION

- Food and Agriculture Organization of the United Nations (FAO)
- National Marine Fisheries Service (NMFS)
- U.S. Department of Agriculture (USDA)
- U.S. Joint Sub-Committee on Aquaculture (JSA)
- U.S. Prawn and Shrimp Growers Association (PSGA)

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Freshwater Prawn Species

- **Market name**
 - Shrimp, Freshwater
- **Scientific name**
 - *Macrobrachium rosenbergii*
- **Common name**
 - Giant Freshwater Prawn

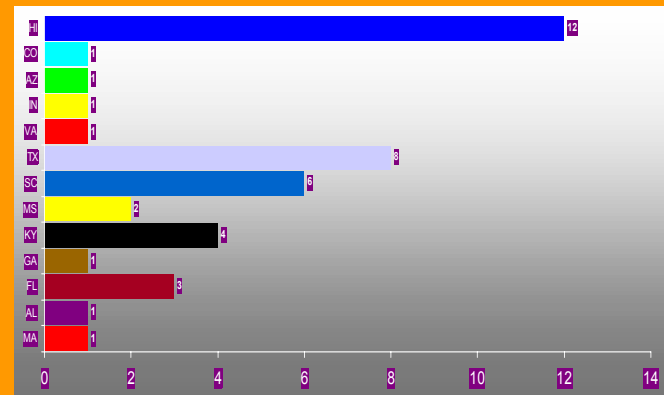


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Number of U.S. Shrimp Farms, 1998 (USDA)

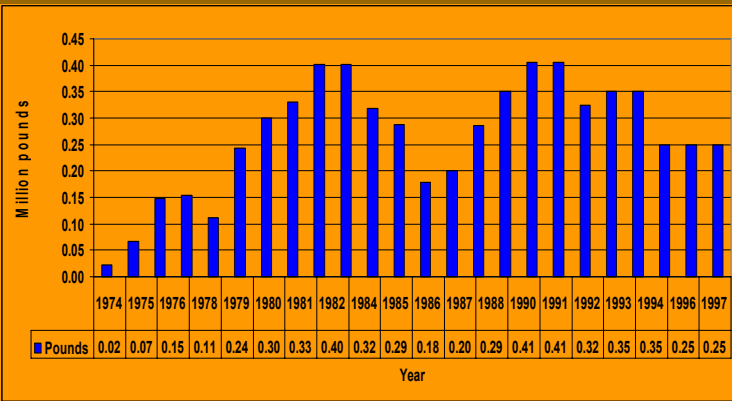


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U.S. FWP Production (FAO, NMFS, JSA)

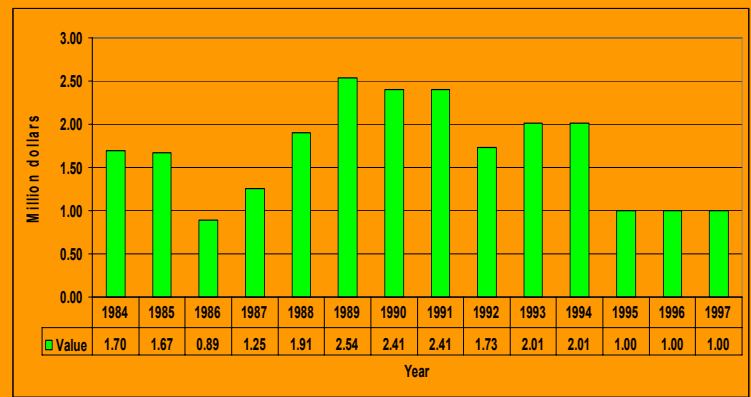


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Value of U.S. FWP Production (FAO, NMFS, JSA)

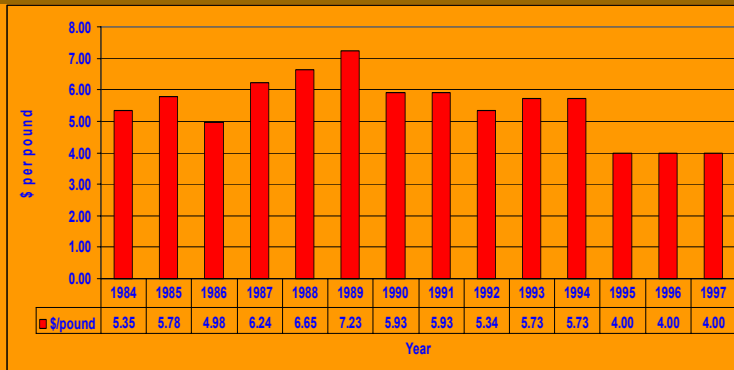


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Imputed FWP Final Prices Paid by U.S. Processors and Dealers

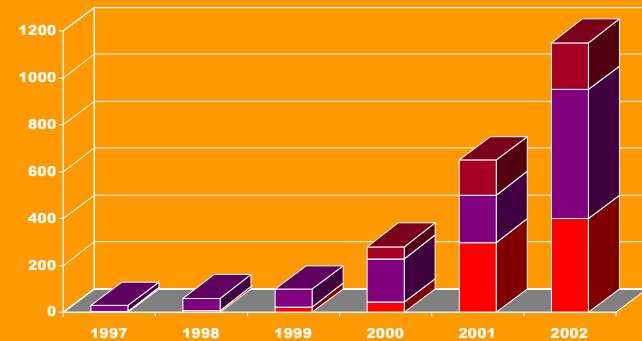


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Estimated U.S. FWP Acreage (??)



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U.S. SHRIMP AND PRAWN GROWERS ASSOCIATION

- **January 22, 2002 Organizational Meeting**
- **Website will be created**
- **Membership:**
 - **Voting members - permitted growers**
 - **Associate members**
- **P.O. Box 537, Anguilla, MS 38721**
- **Tel: 662-686-2894**

INVESTMENT AND OPERATING COSTS IN FWP POND PRODUCTION IN THE USA

- **Hypothetical single enterprise farm**
- **Semi-intensive production system**
- **One crop per year, early May to late September**
- **120 culture days**
- **121 land acres available**
- **Juveniles and commercial feed are available**
- **Input prices are based on Mississippi situation**
- **Feed conversion ratio is 2.5:1**
- **Stocking density is 20,000 # per water acre**
- **Harvest size is 10 # per pound**
- **Prawn yield is 1,200 pounds per water acre**
- **Exp-Com yield gap is 8 percent**

FWP Pond Production Initial Investment Requirements



- 50 two-water-acre ponds, adequately sloped
- common or single harvesting sumps
- permanent aeration & electrical
- feeding equipment & storage
- well, pump and plumbing
- weed control equipment
- tractor, truck & storage building

**\$329.5K per farm,
\$6.6K per pond or
\$3.2K per water acre**

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FWP Pond Construction Cost



- Earth moving (adjacent ponds)
- Drainage structure
- Gravel
- Vegetative cover

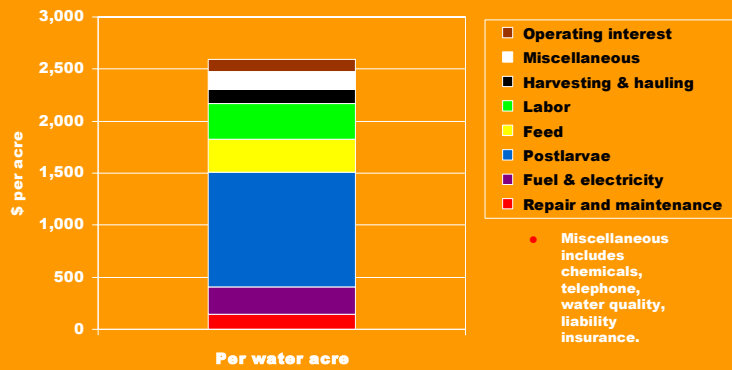
**\$114.2 K per farm,
\$2,283 per pond or
\$1,142 per water acre**

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FWP Pond Production Variable or Operating Costs

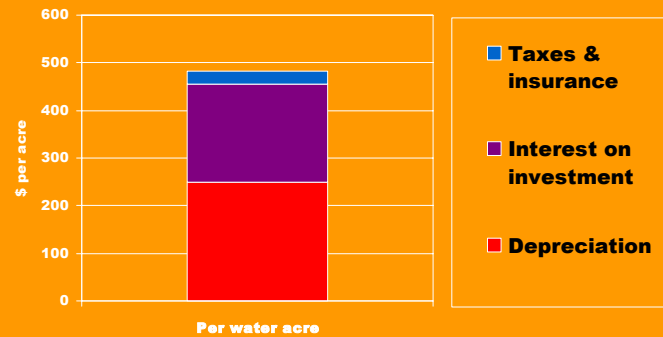


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FWP Pond Production Fixed or Ownership Costs



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CONSTRAINTS FACING THE PWP INDUSTRY IN THE USA

- **Lack of local nurseries**
 - Less than half a dozen nurseries nationwide
 - High price for nursed juveniles
 - Stress during transport to distant sites
 - Need for on site nursery facilities
- **Low survival in grow-out**
 - Expensive grow out yield gap
 - Relatively low production, 800 lb/acre
- **Insufficient processing, transporting & marketing infrastructure**
 - Except in traditional shrimping areas
 - High transport mortality of live FWP

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