

# AN EVALUATION OF THE COMMERCIAL LIVE MARINE BAITFISH INDUSTRY IN COASTAL MISSISSIPPI

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The goal of this study was to compile information on the commercial live marine baitfish industry in Coastal Mississippi to clarify areas of greatest need for focus of prospective research efforts. The specific objectives were as follows:

1. To identify constraints on the commercial production of marine baitfish in Coastal Mississippi.
2. To identify current production and handling technologies of the commercial marine baitfish industry.
3. To identify species and pricing structure of the commercial live marine baitfish industry.

The need exists for the protection of broodstock from predators (double-crested cormorant and river otter) during winter and spring months. The need exists for the protection of fry and fingerlings from predacious and insect larvae during spring and summer months. Scare tactics, use of submersed gill netting (3" mesh) material and lethal cormorant control measures were not successful predator control measures.

Coastal areas provide the best location for commercial pond-based production facilities. These areas provide optimal access to marine waters for hatchery and grow-out pond water supplies. The availability of large tracks of coastal properties and the high cost of coastal land limit the expansion in commercial baitfish production.

Initial investigations on the production of bull minnows were carried out at the Alabama Marine Resource Division's Claude Peteet Mariculture Center (CPMC). Tatum et al. (1982) provided knowledge of the basic cultural requirements for bull minnows through their work at CPMC. Waas and Strawn (1982) were able to enhance production through their work with supplemental diets. Perschbacher and Strawn (1983) enhanced production and lowered production costs through fertilization practices. McIlwain (1977) demonstrated the ability to successfully spawn and hatch bull minnows in tanks.

Sea Grant representatives from the Gulf and Atlantic Regions met in Ruskin, Florida (2004). The focus was to generate a prioritized list of various marine baitfish species as potential candidates for commercial production. The list of potential candidates included Gulf Killifish (*Fundulus grandis*), Atlantic Croaker (*Micropogonias undulatus*), Pinfish (*Lagodon rhomboides*), Spot (*Leiostomus xanthurus*), Striped Mullet (*Mugil cephalus*).