

A Preliminary Report on the Feasibility of Farming Dolphinfish (*Coryphaena hippurus*) on the Northwest Coast of Barbados, W.I.

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ABSTRACT

Caribbean Aquafarms attempted to rear dolphinfish (*Coryphaena hippurus*) in netpens off the northwest coast of Barbados in 1995 - 1996. Two netpens, each 40 ft in diameter and 18 ft. deep, were initially used. They were moored about 600 meters offshore and stocked with dolphin fingerlings airfreighted to Barbados from Florida, U.S. Pen #1 was stocked with 2,800 fingerlings at a density of approximately 14/m³, and the remaining fish were harvested after 150 days. Pen #2 was stocked with 940 fingerlings at a density of 4.5/m³, and the remaining fish were harvested after 80 days. The fingerlings were fed a formulated, high-protein, pelleted diet, occasionally supplemented with frozen fresh fish.

Initial mortality rates were high, the maximum daily rate in the first ten days being about 33% in Pen #1 and 43% in Pen #2. Subsequent mortality rates were lower, but there were few survivors in either Pen at time of harvest.

Estimated growth rates were 3.98 g/day (over 150 days) for Pen #1 and 2.67 g/day (over 80 days) for Pen #2. These growth rates compare favorably with those estimated for dolphinfish in the wild. The results suggest that dolphinfish farming may be feasible from the perspective of growth rates, and hence harvesting time, but the mortality rates must be substantially reduced if the operation is to become commercially viable.

KEY WORDS: Aquaculture, *Coryphaena hippurus*, dolphinfish, netpen culture