

Sunfish - A Viable Replacement for Tilapia

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Tilapia have been cultivated as food fish for centuries. Its popularity is attributed to the perceived ease of producing tilapia as a food fish.

Tilapia's benefits include ease of culture, high tolerance to poor water conditions, feeding ease, and palatability of the end-product. However, fish often stunt in ponds due to uncontrollable reproduction.

During the past 20 years, most of the drawbacks to commercial tilapia production have been resolved. Viable means have been devised to prevent uncontrolled reproduction and stunting. New hybrids have been created and larger growing varieties have been produced.

Due to lower costs of production of tilapia in foreign countries and the lack of import regulations, domestic tilapia production is often less economical.

Sunfish, sunnies, are distant relatives to the tilapia but are better suited to our cooler climate. Due to consumer familiarity and culture ease, sunfish may be a viable alternative to tilapia for domestic producers.

While it is true that little is known about the market demand for sunfish.

Reports from Michigan suggest that consumers will accept locally-produced, farm-raised, fresh fish (Chopak, 1992). There are also reports that Michigan brokers, wholesalers, retailers and restaurants consider sunfish as one of three species of special interest.

Sunfish are easy to culture, spawning occurs in the spring when water temperatures reach 70 degrees. Females may produce in excess of 80,000 eggs in one season. If raised indoors fish may be induced to spawn throughout the year by temperature and photoperiod manipulation. This will provide a ready source of fry/fingerlings for grow out. Sunfish may be raised past the larval stage using rotifers and newly hatched brine shrimp.

Though more research is needed, it may be possible under optimum conditions to raise fish to food market size of $\frac{3}{4}$ pound in less than 12 months. This would require the use of an indoor facility which recirculates the culture water and maintains optimum conditions.

Prices offered for $\frac{3}{4}$ -pound fish in the round (with head and entrails) range from \$1.25 to \$4.50 per pound. Price fluctuations are typically due to the usual supply and demand influences.

Research suggests that a facility which could produce 10,000 pounds of sunfish weekly could demand and obtain a price of nearly \$3.50 per pound throughout the year. Research has shown that the major fish brokers in North America could easily purchase several million pounds of sunfish annually. The key is consistency and quality.



Sunfish being weighed and measured from previous trials at the CREC NAC.