

## **Yellow Perch Production**

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Researchers and industry tend to feel that yellow perch is well suited for both production and marketing in the Midwest. Therefore, it is likely that future aquaculture production in the region will involve yellow perch. Enterprise budgets have been developed to provide an estimation of costs, revenue, and profits that can be expected from a yellow perch operation in Ohio. As these budgets are only estimations based on typical production practices, it is important for every producer to customize the budget to their own individual operation.

### **Cage and Pond Culture**

Aquaculture production normally involves one of two production methods, cage culture or pond culture. Cage culture involves putting the fish in a 4' x 4' x 8' netted cage where they will stay until harvested. The cages are kept anchored in the pond until pulled out for harvesting. If cages cannot be anchored near the shore, then a dock will likely be needed. Fish in a cage culture situation can be a bit more susceptible to disease problems but allows for easier harvesting.

Pond culture involves placing fish in an open pond until harvesting. The ponds are usually drained to allow for harvesting of the fish. In large operation, many small ponds are used instead of one large pond. A typical aquaculture pond size for Ohio is about 1 acre.

Both production techniques require the use of aerators. They help maintain adequate water quality and oxygen levels for the fish. An electrical source must be available at the production site to operate the aerators.

### **Revenue**

It is important to determine the availability of fish markets before going into production. Since fish are typically harvested all at once, a large amount of fish must be marketed in a very short period of time. It is therefore vital to have a reliable buyer identified well before harvest occurs. On average, one acre of yellow perch production will yield 3000 pounds of live fish. The price of fish fluctuates with markets and individual buyers but a reasonable price to assume is \$3.00 per pound of harvested live fish. A typical weight for a harvested fish is about 0.29-0.33 pounds.

### **Variable Costs**

Variable costs are those costs that increase or decrease in response to production levels. There are three primary variable costs in yellow perch production: fingerlings, feed, and labor. Fingerlings (3-5 inches, one year old) are bought in the spring and grown for about 210 days until harvest size. Fingerling price depends upon the size and quantity of fingerlings bought. Extra fingerlings should be purchased to account for a 10-15% death loss common with yellow perch production.

For each pound of gain, yellow perch will eat about two pounds of feed. The price of feed is determined by quality and quantity purchased. Feed purchased in bulk quantities tends to be less expensive than feed purchased in bagged quantities.

Labor is required on a daily basis for feeding and maintaining the operation. The budgets include estimations for labor requirements. However, labor can vary greatly depending on the facilities and management of an individual operation. Labor costs should include all benefits and bonuses received by the employees.

### **Fixed Costs**

Fixed costs are those costs incurred regardless of the level of production or if production even occurs. For cage culture production, the largest fixed cost is the labor and management opportunity costs of the operator. This is the value of the labor and management of the operator if they were used in their next best opportunity.

Ponds are the major fixed costs of a pond culture operation. Pond construction will cost about \$10,000 per acre and will usually last for 20 years.

### **Additional information**

Additional questions concerning yellow perch production can be addressed to the Piketon Research and Extension Center. Aquaculture production specialists are available for consultation. The center can be reached at 740-289-2071.