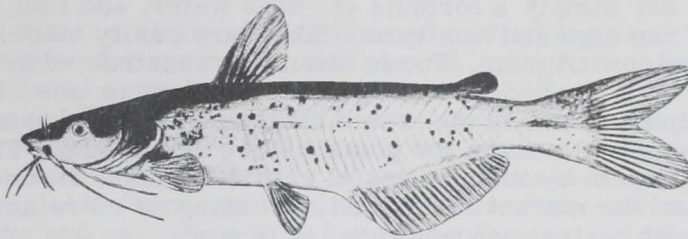


## FOOD FISH FACTS



CHANNEL CATFISH  
(*Ictalurus punctatus*)

Catfish have been a popular and plentiful food fish through thousands of years. Folklore abounds with tales of catfish which sometimes grew to 6 feet in length and weighed over 100 pounds. There is a wide variety of catfish which includes the gafftopsail and sea catfish which live in the ocean. Some of the fresh-water catfish family includes the yellow, brown, black, and flat bullheads; the stonecat; the widemouth and toothless blindcats; more than 10 varieties of madtoms; and the white, blue, headwater, yaqui, and flathead as well as the channel catfish.

### DESCRIPTION

All catfish have long barbels about the mouth used for locating food, are scaleless, and have heavy, sharp pectoral and dorsal spines. Channel catfish, considered by many to be the best eating, are easily distinguished from other catfish by their deeply forked tails, a relatively small head, and small irregular spots on the sides. The channel is the most active of all catfish and grows quite large, the world record is 57 pounds. A desirable fish to many sportsmen, it can be caught with a variety of baits and lures and provides considerably resistance at the end of a fishing line.

### HABITAT

Most catfish inhabit warm, quiet, slow-moving waters. Channel catfish prefer large rivers and lowland lakes with clean bottoms of sandy gravel or boulders. They adapt readily to new environmental conditions and stocking this species in new waters is usually successful. Although catfish originally were found mainly in Mississippi basin waters, they now inhabit waters in many parts of the United States.

### CATFISH FARMING

For many years the catfish market was adequately supplied by commercial fishermen who harvested wild catfish. In recent years the catfish population has decreased as has the number of men who harvest them. However, the demand for catfish has not declined and, because of this, more and more farmers have been changing their fields from agricultural activities into catfish ponds. In ten states, ranging west from Florida into Texas and extending as far north as Kansas and Missouri, approximately 26,000 acres were utilized in intensive catfish farming in 1968. The channel catfish is usually the species chosen for these ponds because of their choice flavor, adaptability, and faster growth. It is estimated that in a 110-day growing season, the channel catfish will attain a weight of  $1\frac{1}{2}$  pounds, if not overcrowded. The recommended stocking per acre to attain this growth is considered to be 1,000 six-inch fingerlings. If more fingerlings are stocked per acre, the growth will be less in the same number of days.

The catfish farmer has a choice of procedures after his fields have been converted into ponds. He may buy fingerlings from other farmers and feed them to market size. Or he may breed the catfish, raise the fingerlings for sale, or use them to stock his own ponds and feed them to market size. Some farmers also dress and deliver the catfish to market or to processors.

(Continued following page.)

## CATFISH FARMING (Contd.)

Raising catfish is not simply a formula of "have water, add fish, reap instant money." The initial investments run high and costly mistakes are easily made. Added to the cost of the land is the cost of pond construction. Ponds should be constructed in soils that hold water, the bottoms should be well graded and completely cleared to permit seining at harvest. Quality of the water is important and the water system must be adequate to get water to the ponds as well as draining water from the ponds before restocking. These are just a few of the problems that must be met by the successful catfish farmer. However, the future of catfish farming is bright and the market demand is increasing as more and more people are becoming aware of this fresh-water, pond-cultured delicacy.

### CONSERVATION

The Bureau of Commercial Fisheries seeks and defines new and under-utilized fishery resources and develops improved harvesting methods and gear as part of its service to the United States fishing industry. To aid the increasingly important catfish industry, Bureau research personnel perfected a seining system with a mechanical haul and demonstrated its use in harvesting pond-cultured catfish. The mechanized seining and conveyer equipment reduced the time and labor required for harvest.

### USES OF CATFISH

Catfish can be bought as steaks, fillets, whole dressed, and skinned dressed. The tender, white, nutritious flesh can be prepared in a variety of ways. It is good eating either baked, broiled, grilled, barbecued, smoked, sauteed, or stuffed. (Source: National Marketing Services Office, BCF, U.S. Dept. of the Interior, 100 East Ohio, Room 526, Chicago, Ill. 60611.)

The Bureau of Commercial Fisheries has published an exciting, full-color booklet that is chock-full of ideas using tasty catfish. It is called "Fancy Catfish," Fishery Market Development Series No. 6 (I 49.49/2:6). For your copy, send 25¢ to the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402.

(Recipe p. 67.)



## CATFISH CANTONESE--PLEASE WITH EASE

Did you know that commercially-raised channel catfish are rapidly becoming one of the more popular fresh-water delicacies on the market today? Gourmets insist that pond-cultured catfish have a flavor superior to most wild catfish. Specialty restaurants and drive-ins featuring catfish are already being built and others are in the planning stages to take advantage of this new popularity. Why? Probably the reason is the quality of the fish. Today's increasing market demand is largely supplied by an ever-growing group of farmers who are changing their fields from agricultural activities into catfish ponds. Ranging west from Florida into Texas and extending as far north as Kansas and Missouri, there were approximately 26,000 acres in ten states which were utilized in intensive catfish farming in 1968.

Catfish Farmers of America, a new organization, hopes to control the marketing of its products and maintain high quality throughout the entire rearing, processing, and marketing pattern. In order to assure that pond-cultured catfish are top quality, catfish farmers are using scientifically-proven techniques and balanced food formulas. Also important is the construction of the ponds which must have sloping sides and a relatively constant water depth, a little deeper in winter than in summer. The cleanliness and temperature of the water, the amount of oxygen in the water, and the absence of predators are only a few of the many precautions followed to produce a quality product.

According to the Bureau of Commercial Fisheries, all catfish are good eating--especially the channel catfish. This fish may be identified by its deeply forked tail, an easy check for the Consumer. Pond-cultured catfish are usually harvested at about  $1\frac{1}{2}$  years of age and weigh from  $\frac{3}{4}$  to  $1\frac{1}{4}$  pounds. The flesh of catfish is white, tender, and tasty, and is an excellent source of high-quality protein, vitamins, and minerals.

Catfish may be prepared in dozens of different ways, but broiling is one of the easiest. "Catfish Cantonese," a Bureau of Commercial Fisheries tested recipe, is particularly good eating. The fish are broiled with a lemony-butter sauce until flaky, then served with a hot sweet-sour topping. This topping is distinctive because it has just a touch of soy sauce to bring an unusually appetizing taste to this catfish entree. Look for pond-cultured catfish in your market and try "Catfish Cantonese" soon.



### CATFISH CANTONESE

- |  |  |
|--|--|
| 3 pounds pan-dressed skinned catfish<br>or other fish, fresh or frozen | $\frac{3}{4}$ teaspoon paprika                                       |
| $\frac{1}{4}$ cup melted butter or margarine                           | Dash pepper  |
| $\frac{1}{4}$ cup lemon juice  | Sweet-Sour Sauce   |
| $1\frac{1}{2}$ teaspoons salt  | Julienne cut strips of fresh<br>carrots, celery, and<br>green pepper |

Thaw frozen fish. Remove fins and tails. Clean, wash, and dry fish. Place fish in a single layer on a well-greased baking pan, 15 x 10 x 1 inches. Combine remaining ingredients except Sweet-Sour Sauce and vegetables. Brush fish inside and out with sauce. Broil about 6 inches from source of heat for 8 to 10 minutes. Turn carefully and baste with remaining sauce. Broil 8 to 10 minutes longer or until fish flake easily when tested with a fork. Place fish on a warm serving platter. Pour hot Sweet-Sour Sauce over fish. Garnish with vegetables. Makes 6 servings.

### SWEET-SOUR SAUCE

- |                         |                                    |
|-------------------------|------------------------------------|
| $\frac{1}{2}$ cup water | $1\frac{1}{2}$ tablespoons vinegar |
| 3 tablespoons catsup    | 2 tablespoons cold water           |
| 3 tablespoons soy sauce | 1 tablespoon comstarch             |
| 3 tablespoons sugar     |                                    |

Combine water, catsup, soy sauce, sugar, and vinegar in a 1-quart sauce pan. Heat. Combine water and comstarch. Add to sauce and cook until thick and smooth, stirring constantly. Makes approximately 1 cup sauce

(Source: National Marketing Services Office, BCF, U.S. Dept. of the Interior, 100 E. Ohio, Room 526, Chicago, Ill. 60611.)