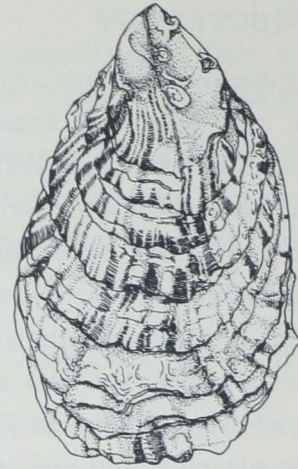


FOOD FISH FACTS

Crassostrea virginicaCrassostrea gigas

OYSTERS

Although no one knows how many centuries oysters have been enjoyed as food, it is known that oyster farming has been practiced in the West since the days of the Romans, and that oysters were cultivated in China long before the Christian Era. Early settlers in America were delighted to find an abundance of excellent oysters along the coastlines and in the bays of their newly found land. Today oysters are more popular than ever. Oysters are still available and harvested from public oyster beds; however, most of today's oyster market is supplied by men who farm the waters along the shorelines of many states.

DESCRIPTION

The oyster is a bivalve mollusk belonging to the Ostreidae family. More than a hundred living species in this large family have been described, but only a few are of economic importance. True oysters are distinguished by having dissimilar lower and upper shells and these shells or valves are hinged together by a complex elastic ligament. The upper valve of the shell is normally flat, while the lower is concave, providing space for the body of the oyster. The two valves fit together making a watertight seal when the oyster closes, providing the shell has not been damaged or broken. Near the center of the oyster's body is an adductor muscle, attached to both valves, which controls the opening and closing of the shell. There are three important species of oyster which are enjoyed in the United States. They are:

The Eastern or Atlantic oyster Crassostrea virginica is found along the Gulf Coast and up the Atlantic Coast to Cape Cod. The Eastern oyster represents approximately 85 percent of the total production.

The Pacific oyster Crassostrea gigas, recently called Pacific king oyster, is grown in coastal waters from Alaska to Northern California. The biggest production area is centered in the Puget Sound, Gray's Harbor, and Willapa Harbor areas of Washington State. This oyster is grown from seed imported from Japan. The Pacific oyster comprises about 15 percent of the production.

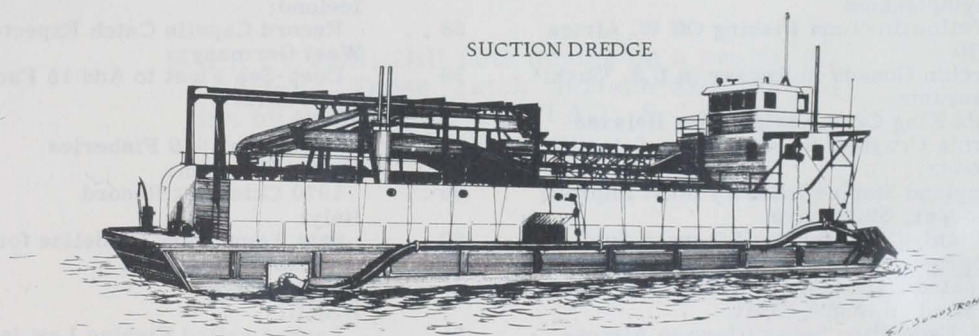
The rare Western oyster Ostrea lurida, also known as Olympia oyster, is native to the Pacific Coast. The yield of this species has declined because of predators, water pollution, and increased cost of production. Some Olympias are still available and it is hoped that, through conservation methods, the cultivation of this species can be increased.

HABITAT

Oysters are found along the temperate and tropical coastlines of all continents. They live and grow between tidal levels or in the shallow waters of bays and estuaries; however, some oyster species live in waters several thousand feet deep. Oysters can adapt to living in waters with considerable changes in salinity and temperature but the growth is more rapid in warm waters and a marketable size is reached much quicker than in lower temperatures.

OYSTER HARVESTING

A number of methods are used in harvesting oysters. In some areas, where there are natural oyster beds, no mechanical methods are allowed and the harvest is done by hand-picking during low water or by the use of manual tongs. If the oysters are plentiful, a tonger may take up to 25 to 30 bushels a day. In other areas, such as the public grounds of Chesapeake Bay and Connecticut, only hand-operated dredges are permitted. Privately owned or leased oyster beds are harvested by large machine-hoisted dredges, or by suction dredges which work on the same principle as a vacuum cleaner. Suction dredges are very efficient in carrying oysters and other materials up from the bottom to the conveyor on the deck of the dredge boat. The suction dredge, in addition to harvesting oysters, helps to clear the beds of starfish, mussels, and other enemies of oysters. The escalator or scooper-type of harvester is used effectively in relatively shallow water.



MANAGEMENT AND CONSERVATION

Oysters occur along practically every coastal area in the United States. However, many formerly prolific oyster beds have been depleted because of over fishing and a lack of cultivation. Pollution is also a very serious factor. In an attempt to assist the States in better management of their fishery resources, Congress passed two major pieces of grant-in-aid legislation. They are the Commercial Fisheries Research and Development Act of 1964 and the Anadromous Fish Act of 1965. Both Acts authorize the Secretary of the Interior to enter into cost-sharing cooperative agreements with States and other non-Federal interests for commercial fisheries research and development. These programs are administered by the National Marine Fisheries Service. State response has been excellent, but there is still much to be done in the conservation of oyster growing areas as well as in other fishery problems.

USES OF OYSTERS

Oyster meats are an excellent source of high quality protein, minerals, and vitamins, and they are easily digested. Because of the high mineral content, oysters are often recommended by doctors for patients with anemia. Oysters can be used in a wide variety of cooking methods and have special appeal because they are easily and quickly prepared. To retain the oyster's delicate flavor, never overcook. Oysters should be cooked just long enough to heat through and remain plump and tender. (National Marketing Services Office, NMFS, U.S. Dept. of Commerce, 100 East Ohio, Rm. 526, Chicago, Ill. 60611.)