DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

FISH AND WILDLIFE SERVICE

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Pictures Available.

So that an oyster connoisseur may know the pedigree of his favorite type, the Fish and Wildlife Service of the Department of the Interior today recounted the niceties of oyster cultivation and farming as the 1940-41 season for the bivalves got under way.

Heredity, genetics, cross-breeding, and pedigrees, the Fish and Wildlife Service, reported are terms well known to those familiar with animal and plant breeding. What is not generally known is the extent to which the oyster farmer uses selected stock grown under as nearly perfect conditions as possible to produce fat oysters of uniform size and excellent quality.

The first concern of the oyster farmer is to provide for an adequate supply of seed oysters, either by growing his own or by purchase from other sources of supply. By trial and error he has learned which of his oyster bottoms are best suited for spawning of the adult oysters, setting and survival of the young oysters. First these grounds are carefully cleaned by dredging up the old shells, debris, and the natural enemies of the oyster--such as stars, drills, and conches.

In the early summer, just before spawning begins, thousands of bushels of oyster shells from the shucking houses are scattered over these seed grounds at the rate of 500 to 1,000 bushels per acre. Spawning beds of large mature oysters

are maintained nearby or large spawners are scattered over the setting grounds on top of the shells. In the words of one of our largest oyster farmers, this parent stock consists of "carefully selected, healthy oysters planted on or adjacent to the seed grounds to insure the finest possible grade."

Female eastern oysters of this type may discharge from 100 million to 500 million eggs in a single season. After a free swimming period of about two weeks, the tiny oyster larvae has begun to form its shell and is ready to attach itself. Under especially favorable conditions, these tiny oysters (spat) may literally cover the dead shells with numbers ranging from 1,500 to 65,000 spat for each bushel of shell. If allowed to remain and grow on these grounds, they would form dense clusters of growing oysters, many of which would be crowded out and perish and the remaining stock would be of uneven size and shape.

"To overcome this difficulty, these seed oysters are transferred to growing grounds at the rate of 300 to 500 bushels per acre. Many of the growing grounds are in the deeper water where enemies are fewer and the oysters do not spawn naturally, thus removing them from the danger of another set of oysters which might smother many of them. At the end of a year when the crop should have doubled in size, about half of it is thinned out, the clusters being broken up, and moved to other growing grounds to prevent crowding and permit them to grow into large uniform sized oysters. This process may be repeated during the next two years."

Having reached a marketable size, the oysters are moved to maturing grounds usually in water of two or three fathoms where an abundance of food will fatten the oysters for marketing. Thus, up to this time--when the oysters are five to six years old--they will have been transplanted several times: sometimes to

waters only a few miles distant, to those of a neighboring state, or to waters several hundred miles from the birthplace. They may have been packed in barrels and transported across the Atlantic to Britain, there again bedded down and, later during the summer when English oysters cannot be eaten, taken up and marketed so that British consumers may have oysters the year round. Such stock consists of what may well be termed "pedigreed oysters of uniform size, regular shape, conditioned and healthy."

In large-scale oyster-farming operations, there is a heavy investment tied up in a crop requiring five to six years to reach marketable size, utilizing a heavy acreage of underwater areas, as well as shore plants, and a fleet of vessels with trained crews which may become an extremely valuable asset in time of war.

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