

summer, the time when those raised for market will be ready for the table.

If further observation shows that this rate of stocking ponds is the correct one, as I think it will, it is not difficult for the carp culturists to calculate what returns he may reasonably expect from each acre of his market ponds. Five hundred fish, each weighing $4\frac{1}{2}$ pounds, allowing a little over 10 per cent for loss, will make him 2,000 pounds to the acre. The price he will receive for them will depend upon their quality, in connection with his skill in marketing them; and their quality will depend much upon the manner in which they are prepared for market.

BORDENTOWN, N. J., *January 28, 1885.*

53.—TIME OF APPROACH OF FISH TO THE NEW ENGLAND COAST.

By N. E. GOULD.

The following is a statement of the several kinds of fish coming on our coast (the southeastern part of Massachusetts). The first fish that visit our coast are the alewife herring, which usually appear about the 15th of April. The present year the fish were seen on the 20th of that month. The alewife herring never school or appear on top of the water in large numbers in this vicinity, although large numbers of them are taken annually.

The next that come are the shad, which vary but little from the middle of April. The first caught the present season was on the 23d of the month. These, like the alewives, never school or seem to come to the surface of the water, but are caught during the month of May in considerable numbers.

The herring come about the 10th of May. This year the first caught here was on the 11th of the month. These are always seen in large numbers schooling at the surface of the water, and are seldom caught unless they are so seen. The first schools seen the present year were on the 11th of May.

The first mackerel put in an appearance on May 2, and the first schools on May 22.

The first bluefish came on the 27th of May, but no school until June 16, and these very small.

The first menhaden were caught on May 14, but no schools were seen during the season, although these fish were at a former time very numerous on this coast during the month of May. None have been seen schooling in large schools since the spring of 1875. Before that time they were probably the most numerous fish that passed along this coast.

UNITED STATES LIFE-SAVING STATION,

Chatham, Mass., June 20, 1885.