

In view of what we know as to the requirements of fishes in the way of food, the question naturally arises whether, in the above distribution, the available insect food was sufficient and of the right kind. Are we certain that the species of trout placed in a certain lake would find the right kind of food there and sufficient quantity of that food?

The Problem Stated

This brings me to the chief point of my address, which is, that in order to carry out with the greatest measure of success the restocking with fish of waters which have been depleted, or the introduction of new species of fish into new waters, we must have information as to the available food for those fishes which are being re-introduced or introduced for the first time. The case of the farmer again crops up: no intelligent farmer would sow the seed of a crop on soil not containing the plant food necessary to the growth and fruition of such a crop. To bring forth a hundred-fold, the seed must fall on good ground. To ensure success in the introduction of fish fry, they must be introduced into waters in which it is known that food of the right kind and in sufficient quantity is present. If the farmer, wishing to sow his seed, finds the soil poor in nitrogen or some other necessary plant food, what does he do? Everyone knows he sows a crop such as clover, that will give the soil the necessary nitrogen, or, by many of the known methods, he supplies the deficiency, whatever it may be. In fresh-water fishery work the same methods should be followed. Associated with the fish hatchery there should be, if it is found necessary, an insect hatchery. I have no hesitation in predicting that when, in fishery work, a stage of advancement equivalent to the present state of advancement in agriculture is reached, we shall have the cultivation of the food of the fishes carried on in conjunction with the hatching and introduction of the fry. Prof. Needham, to whom I have already referred, has shown that the artificial culture of many of the insects constituting the food of fishes is practicable.

Fish Farming

The culture of the insect food of fishes brings me to the concluding section of my address and that is the possibilities which lie in the idea of fish farming. To many people this will be a new idea, but I can assure you it is not; on the contrary, it is very successfully carried out in Europe. The people in this country, however, have not yet realized the inherent possibilities of this form of pisciculture. There are many farmers throughout Canada who have farms, parts of which are too low-lying and wet to drain, and, in consequence, such areas lie unproductive; and yet, if the farmer only realized the significance of the facts which I have been endeavouring to lay before you, they could make such useless and otherwise