

Among the causes to which depletion is ascribed are—Overfishing or increased fishing (Auckland, Grey District, North Canterbury, South Canterbury); pollution by sawdust (Grey District); dams and weirs erected by Power Boards (Taranaki); clearing of bush and consequent silting of rivers (Waipapu); trout feeding on them (Wanganui); perch feeding on them (Otago); the taking of adults by Maoris on their downward spawning migration (Auckland, Hawke's Bay—Inspector's report, 1922.)

Among the above reasons I think that by far the most weight must be attached to overfishing. The other factors mentioned, which hold good in varying degree, are of local or minor importance. There is no doubt that where pollution by sawdust occurs (which is, of course, an offence against the regulations) it is inimical to the welfare of all fishes.

In reply to the question whether a limited whitebait-fishing season is favoured by the society, the following were the replies: "Yes" (Auckland, Waipapu, Tauranga, Rotorua, Wellington, Marlborough, Grey District, North Canterbury, South Canterbury, Ashburton, Waitaki, Southland, Otago (for some rivers), Hawke's Bay); "No" (Taranaki, Waimate, Westland). Wanganui and Otago (in the case of the Shag River), replied that a limited season was unnecessary. But in both these cases the whitebait-fishing is of relatively little importance.

It is clear that the majority of societies are in favour of a limited fishing season, and some of them are very emphatic about it.

*Suggested Duration of Fishing Season.*—The replies of the societies to the request to suggest when a limited season should open and close may be represented graphically. The thick lines show the suggested duration of fishing season.

|                        | July. | August. | September. | October. | November. |
|------------------------|-------|---------|------------|----------|-----------|
| Auckland .. ..         |       |         |            |          |           |
| Tauranga .. ..         |       |         |            |          |           |
| Hawke's Bay .. ..      |       |         |            |          |           |
| Wellington .. ..       |       |         |            |          |           |
| Marlborough .. ..      |       |         |            |          |           |
| Grey District .. ..    |       |         |            |          |           |
| North Canterbury .. .. |       |         |            |          |           |
| Ashburton .. ..        |       |         |            |          |           |
| South Canterbury .. .. |       |         |            |          |           |
| Waimate .. ..          |       |         |            |          |           |
| Otago .. ..            |       |         |            |          |           |
| Southland .. ..        |       |         |            |          |           |

The return from the South Canterbury Society contained the suggestion for closing the season during the second half of September and again during the second half of October and finally on the 10th November. This would certainly admit of escapement for a proportion of the runs, which normally take place during September, October, and November. It might be difficult in practice to enforce these short-period closures or to bring them to the notice of whitebaiters. A further suggestion has been made, by an experienced acclimatization society official, that it would be best to close only one river in a district at a time, so that while one river was closed others would remain open, in succession. The idea is to enable the closed waters to be efficiently watched. This policy might be somewhat cumbersome to carry into practice with regard to the notification of the particular waters closed at a particular period, but it has much to recommend it.

For the present, however, it seems most necessary to concentrate on the importance of the *general* administration of the whitebait-fisheries.

Since the consolidated Fishery Regulations were gazetted in 1906, seventeen additional or amending regulations relating to whitebait have been made. A review of these shows that the fishery was administered in a somewhat uncertain and tentative manner. On the whole the tendency has been to relax restrictions rather than increase them.

Our primary and principal duty is, while providing for their rational exploitation, to ensure the maintenance of these valuable fisheries for the future. This has to be done by providing that a sufficient quantity of the species in each river is allowed to survive to form a breeding-stock for the next generation. It must be admitted that to do this with anything like the precision that is obtained in husbandry is impossible. It must be admitted also that our fund of information as to the natural history of the whitebait and the statistical history of the fishery is at present lamentably little. But in a problem like this it would be disastrous to wait until the depletion and deterioration were so marked as to be patent to all. I am certain in my own mind that the time has come for, at any rate, a modicum of restriction upon the fishing. It has been frequently stated that in the old days the Maoris religiously refrained from catching the first and last of the whitebait run.

One of the chief objects to be gained from the restrictions I am proposing is a better knowledge of the fishing operations and the produce which they yield in different places from year to year. For this reason I think it is highly desirable that all commercial whitebait fishing should be done under license. Licenses should be issued on the condition that the licensee agrees to make a return of his catches and their value (on special forms to be provided by the Department). Alternatively—and I think it is a better system—the onus of making the return might be placed upon the wholesale buyer, as in the Californian system of collecting fishery statistics.

The revised regulations which have been proposed contain two entirely new provisions—(1) The licensing of all persons fishing for whitebait for purposes of sale (10s. for a hand-net license and £1 for a set-net license); (2) the prescription of a close season. It is proposed that the season during which