

BLUE-COD FISHERIES, FOVEAUX STRAIT.

Fishing in Foveaux Strait may be divided into the following categories:—

- (1) Hand-lining for blue cod;
- (2) Hand-lining for hapuka (groper);
- (3) Trawling;
- (4) Drag-netting; and
- (5) Set-netting.

Of these, the blue-cod fishing is by far the most important, with trawling next, and the other methods more or less negligible.

Hand-lining for Blue Cod.

Production.—This important fishery has developed several problems in recent years. These problems, although they appear to be rather varied, nearly all arise from the same prime factor—the depletion of the grounds inshore which are handy to the fishing ports. A great mass of evidence was tendered in this connection and can only be dealt with briefly under the various headings:—

- (a) Depletion of the blue-cod fishery.
- (b) The new size-limits for blue cod and the escapement of undersized fish.
- (c) The necessity for close seasons and protection for blue-cod nursery grounds.
- (d) Loss caused by bruised fish.

Of these problems, (a), (b), and (c) are very closely connected.

Depletion of the Blue-cod Fishery.—The consensus of opinion amongst the older and more experienced fishermen who are well qualified to judge is that the inshore grounds are showing definite signs of depletion, and that they are now only carrying stocks of younger and smaller fish. The more distant grounds, such as South Cape and The Traps, are still carrying a good stock of fully grown fish. The handy grounds have been fished hard by the many new arrivals in the industry, particularly since the sawmills at Stewart Island closed down. The men employed at the sawmills, having to face the problem of earning their living when the occupation for which they had been trained failed, had to take to fishing as the only alternative available. Being in the main inexperienced in the handling of boats when they took over the new work, they concentrated on the nearby grounds, with results which, if the depletion is not checked in some way, will be serious for the industry as a whole.

The most disquieting fact is that these handy inshore grounds appear in nearly every case to be nursery grounds, in that they carry stocks a large proportion of which are young fish. If the cause of this excessive population of small fish is not that the grounds are nursery grounds, then an even more serious construction must be put on the evidence, and that is that the depletion of these grounds has been carried so far that the older age groups of fish have been practically fished out and the men operating now are concentrating on the smaller fish of the younger groups which have been left.

In making any recommendation tending to save these grounds, due consideration has to be given to the men in the small boats and the effect on their livelihood of any proposed restrictions, but we have also to remember that if the depletion is carried far enough their livelihood will vanish, without possibility of recovery.

The New Size-limits and the Escapement of Small Fish.—Up to April, 1936, the legal size for blue cod was 12 in. in the natural state or 10 in. when properly headed. In April, acting on representations received from fishermen in other parts of New Zealand, the legal limit was raised to 13 in. over-all and 10 $\frac{3}{4}$ in. when headed, with a proviso that fish taken by any person other than a licensed fisherman for his own use had only to be up to the original standard. The Half-moon Bay fishermen (Stewart Island) protested against the increase, on the following grounds: (a) That the loss of the fish between 12 in. and 13 in. would be serious, in that fish of this length constituted the greater portion of their catch; (b) that if such fish were put back in the water they would be lost in any case, as they would either die or be taken by mollymawks or barracouta before they were able to swim away.

On objection (b), in its reference to mollymawks particularly, the following statement submitted to the Committee by Mr. R. A. Falla, Director of the Canterbury Museum, Christchurch, is illuminating:—

“In my experience of the habits of mollymawks of several species, I have not seen them dive to any depth beneath the surface. From the ordinary swimming position they can submerge the head and beak to a depth of about 2 ft., and by an effort at diving I have on one or two occasions seen them submerge the body in a position in which the bird's back and tail are below the surface and the beak therefore effective to a depth of nearly 4 ft. Their structure is such that they are able to do this only with great difficulty, the reason being that their plumage is not compact, as it is, for example, in diving ducks, shags, and shearwaters, and that probably they are unable to use their feet in making a dive to any depth.

“If a contention should be made by fishermen that they go deeper than I have stated, there is this to be said in favour of it—that the larger of the two species commonly found on the fishing-grounds has already adapted itself to a considerable extent. It is one of the species that seldom or never follows ships on the high seas, and has in consequence been called the shy mollymawk. Having thus far overcome the natural shyness, it may possibly have become a rather better diver than others of its kind, but I have no evidence to this effect, and for reasons given above think it unlikely. The size of the wings is also a hindrance in submerging.”