

On the south end of the North Kaipara Beach a considerable mortality of toheroas, both large and small, occurred some time prior to 22nd March, 1946. The reason for the large number dying was because the beds were rather near high-water mark and the tide did not cover them for several days during the hot weather. Some of the toheroas finally endeavoured to move to a lower position and had the tongues and siphons bitten off by fish, with the result that although still living, they were unable to dig into the sand and so continued to wash about in the surf. Those seen were so large that the birds were unable to lift them off the beach in order to drop them from a height—their usual method of breaking the shell. The beds on this beach are very well stocked.

The south end of Muriwai is depleted to a similar degree that existed in 1937 when there were few beds on the southern ten miles. From eighteen to twenty-six miles north of the road there are still good stocks. The effects of commercial digging which were carried out in the two previous years appear more serious than is actually the case. It was anticipated that the good stocks of 1942–43 would decline naturally, and this has occurred. It is probable, also, that 1947 will see the lowest stock on Muriwai for many years. A reasonably good fixing of young toheroas occurred in 1945 and may be expected to yield a good increase in the supply over 3 in. by 1948.

CANNING EXPERIMENTS

A successful series of experiments in canning pauas (*Haliotis australis* and *H. iris*) were completed. *Haliotis* species are widely distributed; in the Channel Islands they are called ormers, and in the United States of America, where they are canned, abalones. Shells of *H. australis* over 6½ in. long have been obtained from Stewart Island.

Canning whole, with only the viscera removed, does not make a very attractive pack, the product being a dark green and the liquid somewhat slimy, although they were classed as satisfactory to eat by some people. In this pack the “fringe” or sensory margin of the mantle, which extends almost all round this shell-fish, is hard in the fresh state, but becomes jelly-like when canned and appears to contribute the viscid substance to the liquid. For the best product produced the fringe was removed, about ½ in. thickness cut from the foot, and the sides trimmed to remove all trace of black or green colour. The resulting meat is quite white. Pauas treated in this way and canned whole or minced were equally good, the meat being tender and the flavour rich. Some observers classed them as superior to toheroas.

Experiments were continued on canning eels: samples were obtained from the Hutt and Manawatu Rivers, and from Lake Ferry, covering long and short finned, migrants and non-migrants. Packs were prepared in several different ways, including eels in agar, vinegar, and oil, and smoked eel. The latter product is a delicacy which in flavour is difficult to better and is considered equal to the best New Zealand marine products such as canned whitebait, toheroas, or oysters.

Apart from smoked eel, the straight pack of large long-finned eels with the addition of salt only gave the most satisfactory product for New Zealand, although eels in oil may be a desirable product where there is a market for an oily fish. A report on the canned-fish industry, with the results of experiments, is being prepared.

LEGISLATION

In this field there were very important changes. In November the Fisheries Amendment Act, 1945, became law. Concurrently the fishing-side of the industry was delicensed under the Industrial Efficiency Act, the wholesale, retail, and export of fish having just previously been delicensed.