

Utilization of Fish Waste in Canada

By

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THE utilization of fish scrap in agriculture has been in vogue for centuries in many maritime countries. It is said that the Indians, before the advent of white men, used large quantities for fertilizing purposes in this country. While serving the British Government in the Malay States some twenty years ago, I found it the common practice to make use of fish, both as a fertilizer for the soil and a food for pigs, in many of the Chinese villages having access to large fishing areas. These practices had been handed down for generations. In the Shetland isles and west coast of Scotland, I have known surplus fish to be fed to both sheep and pigs. Doubtless, in these days, there is no surplus.

As for America, we hear of a fish-rendering factory being erected as far back as 1850 on Shelter island, New York, but, in all probability, the products manufactured were only oil and fertilizer; and, in fact, so far as this continent is concerned, fish scrap is converted only into fertilizer, except otherwise, perhaps, in a very small way.

It is in Germany we have to look for knowledge of the early using of fish waste as live-stock feed, and it was in that country, some eighteen years ago I studied the problem myself, though my work was entirely confined at that time to the manufacture of fish-waste products. Much useful investigation since that time has been done on the European continent and also in England.

In Germany, we find Lehmann stated in 1892, that fish meal ranks with meat meal and that laboratory results show that 98.6 per cent of the protein is digestible. Fink, in 1896, stated that he finished off steers on fish meal with other feeds, giving them 3 lbs. per day each, and as a result he obtained a gain of 303 lbs. in 90 days. Schenk, in 1903, conducted a very exhaustive series of experiments and, with other investigators, came to the conclusion that herbivorous live-stock were able to make better use of the protein in fish meal than they were of protein of vegetable origin. These investigators found fish meal universally an economic feed of very high value and that it left no taint with either milk, butter, bacon or eggs when fed in reasonable quantities on the farm. Martinelli, as reported in the Journal of the International Institute of Agriculture, states that animals fed on fish meal made more rapid gains than on meat meal, and not only that, but they were of superior quality.