

## Some Considerations Concerning The Future Of The Sponge Industry

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NO ONE FAMILIAR with the facts will deny that the supply of genuine sponges has dwindled to an alarming degree and that synthetic sponges have made heavy inroads in the market places. The time has come when the facts should be faced squarely. Adoption of this policy and adequate planning to rebuild the industry may yet save it from exhaustion.

For every pound of sponges derived from the domestic fishery in 1948, over 13 pounds were produced in 1935, and for every pound of sponges imported in 1948, in 1935 nearly two pounds were imported. In 1948 United States imports were seven times domestic production. This rapid decline in supply has developed certain marked results: (1) Prices of domestic sponges in some cases increased over 800 per cent, thus pricing them out of many market channels; (2) This created a fertile field for the development of the synthetic sponge industry, with the result that there has been a rapid expansion of facilities for manufacturing of cellulose sponges in the United States and the almost complete replacement of genuine sponges with the synthetic products in the European markets. French interests holding the Farben patents are reported to have pushed the sale of synthetic sponges in France, the United Kingdom, Italy and other countries, while Sweden is also manufacturing synthetic sponges of excellent quality. (3) Only in those fields in which the genuine sponge has exceptional advantages over the synthetic has the market for the genuine sponge remained open.

From the foregoing it appears evident that (1) With improvements in quality and the lowering of prices of the synthetic sponge, the channels of trade open to the genuine sponge will grow narrower and narrower until the level of demand will fall to one of insignificance; (2) Proposed tariff increases, if successful, would further reduce the supply and raise the price level of genuine sponges. Such a procedure would benefit the manufacturers of cellulose sponges, encourage improvements in their product and automatically reduce the demand for genuine sponges to the vanishing point. (3) To change this trend it is necessary to develop a program of fishery management of the sponge areas to encourage their rehabilitation, rigidly enforce regulations protecting the undersized illegal sponges and develop methods of propagating sponges on a commercial basis to augment the fishery harvest.

As confirmation of the extent to which cellulose sponges have displaced genuine sponges, Dr. Richard Kahn, of the U. S. Fish and Wildlife Service, has figures to show that during the fiscal year ending June 30, 1948, the Bureau of Federal Supply, Post Office Department, Army Ordnance Department, and Navy stores purchased 44,446 natural sponges for \$36,000 as compared with 329,000 cellulose sponges for \$74,703. As a matter of fact, the Post Office Department's purchases consisted only of cellulose sponges, and no natural sponges whatever. It might be added that the government paid an average of 81 cents for genuine sponge while paying 22.7 cents a piece for cellulose, or about 1/3 the cost of the genuine sponges. These figures indicate the futility of trying to raise tariffs on genuine sponges and thus make it easier to supplant the genuine with cellulose sponges. Such a policy would hasten the demise of the industry. Instead, trade should be given every encouragement to

purchase sponges from all world production areas to maintain the demand wherever it still exists. With the received reduction of duty on imports of synthetic sponges from 60 per cent to 45 per cent ad valorem and a further reduction in price through devaluation on currencies, it does not appear to urge increasing the import duty on genuine sponges. One foreign manufacturer of synthetics is said to be prepared to ship several million of these to this country and is only operating at about one third of his capacity.

It is now generally recognized that the supply of our natural resources—soil fertility, forests, fisheries and game—is not inexhaustible. In fact many of these resources, like the sponge fishery, are in grave danger of exhaustion. It is now an established fact that these resources can be restored to productive levels by the establishment of a suitable program of management. In the case of the fur seals of the Pribilof Islands, pelagic sealing had reduced the stock to about 130,000 animals by 1910. By the adoption of an adequate program of management, that herd has been rebuilt to over 3 million animals, permitting the largest annual kill in history. Not so many years ago the future of the halibut fishery of our Pacific shores was a cause of grave concern. The adoption of a continuing program of fishery management has restored that fishery to former productive levels. Similar programs are being adapted to various other fisheries. The Gulf States Marine Fisheries Commission should undertake the development of procedures necessary to establish a similar management program for the sponge fisheries. Certainly an industry of such widespread national interest, an industry which has netted the sponge fishermen of Florida as high as 3 million dollars a year, yielding a product of such unique value to a number of our important industries, is worth saving. Immediate steps should be taken to develop such a program. This Institute should give consideration to the establishment of an International Sponge Commission for dealing with the development of a fisheries management program for the sponge fisheries of the Bahamas, Cuba, and the United States. Such a commission should be able to develop a program for stabilizing and placing the industry on a sustained yield basis.

In line with the foregoing suggestion, it should be remembered that Great Britain interested herself in the development of a plan of cultivation which was well on the road to commercial success when the blight of 1939 hit the Bahamas. Such a Commission could concern itself with attempts to safeguard the industry against repeated attacks of this kind. Dr. F. G. Walton Smith was one of the foremost leaders in the Bahamian development and should therefore be in a good position to evaluate the potentialities of such a program, if he can make a careful study of this proposal.

Sponges can be cultivated. The next step is to demonstrate that the venture is sufficiently practical to enlist private capital.

The greatest deterrent to a more important branch of trade is the relatively small size of the sponge industry with resulting high prices. Obviously if we could increase production and lower prices we would improve the competitive situation in relation to synthetic sponges.

It is a well established fact that the Japanese were cultivating sponges in the Marshall Islands before War II. Dr. W. M. de Laubenfels, who made an extensive study of the sponge situation in American Trust Territory this past summer, reports:

I am confident that if a good return is forthcoming to the natives, that a very considerable source of supply can be developed over the next five years from the Trust Territory. It is comparatively easy to

culture sponges there in large quantities, perhaps as many as twenty thousand to an acre. The waters in the lagoons of the atolls are policed effectively by the natives who live around the atoll, so there is not the trouble of stealing which in some parts of the world interferes with artificial cultivation. The natives have the requisite skill, and partly from Japanese teaching and partly from what I have shown them, are ready to go ahead. (From letter of October 3, 1949.)

Unfortunately, based on specimens submitted to the Sponge Institute, the cultivated sponges of the Marshall Islands do not appear to possess high commercial value. The question which comes to mind is: Would high quality commercial sponges, such as sheepswool, transplanted to these waters, reproduce high grade commercial sponges? Studies are in progress to determine the practicability of transplanting sheepswool or other desirable species from the West Indies to the Marshalls for determining whether they would grow and produce quality sponges. Fortunately Dr. de Laubenfels, in a letter dated October 31, advises that he was able to move live sponges as much as 200 miles to be used for cuttings, "and these are growing rapidly and healthily. There is good evidence that now I know how to move them." It therefore appears desirable to attempt such a venture. Dr. de Laubenfels' work was conducted under the auspices of the Pacific Science Board, comprising the National Research Council and the U. S. Navy, which provided excellent facilities.

In summary: The annual production of genuine sponges has sunk to such a low level that they are rapidly being replaced by synthetic products which are much cheaper in price, that under such circumstances the arguments favoring increased tariffs on imports of genuine sponges are specious and would merely lead to the more rapid displacement with cellulose and other synthetic sponges. If consumers, especially those who find no acceptable substitute for the natural sponge, are to retain their interest in the genuine article, they must get the supplies they need. Every possible effort must be made to provide a sponge fishery management program, to stabilize production and assure a sustained yield. This should be supplemented by encouraging the cultivation of sponges on a commercial basis. If a constant source of supply is to be assured it may be found desirable to transplant high grade sponges to other areas.

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## **Some Possibilities for Fisheries Development in the Gulf of Mexico**

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THE DIVISION OF OCEANOGRAPHY of the Southwest Research Institute was established only a few months ago after long consideration and study as to whether or not an independent not-for-profit institution of this character, dedicated to the economic advancement of the states of the Southwest, and the nation in general, could contribute to the development of the Gulf of Mexico as a great asset to the nation. Recommendations came from every direction that this field should be entered because there is so much to be learned, and because the other activities of the institution relating to production of food, of petroleum, and the processing of natural resources are so closely related to