Sponges - A history and dialogue of production

References: http://www.tarponsprings.com/sponge.html http://www.tarponsprings.com/sponge.html http://www.baysoundings.com/sum04/photos/hook.gif http://www.fao.org/docrep/field/003/AC286E/AC286E02.htm http://www.acmesponge.com/educ.htm http://www.fao.org/docrep/field/003/AC286E/AC286E02.htm http://www.acmesponge.com/educ.htm http://www.acmesponge.ht

The most ancient method of sponge collection is diving. In recent years modern diving devices have been employed. In addition, sponge trawling has been becoming more and more important, creating risk of damaging the sponge beds. The processing of the sponge starts on board. As soon as the sponge is collected it is kept for some time in the open air so that it dies. Then the sponge is put back into marine water until the black pellicle which covers the sponge can easily be taken off. Afterwards the sponge is beaten until all organic parts not belonging to the skeleton are removed. In a second period of processing the sponges are bleached in order to give them the desired yellowish color. In addition to diving and trawling, beach collection of sponges has a certain role in countries like Libya and Tunisia. These sponges are generally sold raw, that means without any preparation.

In the first half of the 19th century, sponge fishing started in the Mediterranean on a commercial basis. By the end of the last century sponge fishery was well established in the U.S.A. (Florida), Cuba and other Caribbean islands but sponges from the Gulf of Mexico and the Caribbean are regarded as being of an inferior quality. In the 1930's the American sponge fisheries, mainly in the hands of Greek expatriates, reached its peak level and declined from then onwards well into the 1950's. Cuban sponge production dropped from more than 13 million animals (more than 1,000 mt) in the mid 1930's to only 0.2 million in 1947. The development of artificial sponges together with a catastrophic disease in the Caribbean sponge beds were the reasons for this tumble in production. At present, Cuba is the main sponge producer in this area with 53.3 mt collected in 1986. Though a certain revival of the Caribbean sponge fisheries was experienced after the mid 1950's, most of the present production of commercially-used sponges comes from the Mediterranean (Tab. 1).

Table 1. World production of sponges by producing areas (mt).

	Years	Mediterranean	Caribbean	Pacific	Total
Average	1927-1936	347.5	998.6	-	1,346.1
Average	1977-1986	123.2	66.2	30.7	220.1

In the 1980's World sponge production oscillated between 206 and 360 mt (Tab 2). Tunisia used to be the major producer accounting for about half of world production of sponges. In 1986, Tunisia collected some 100 mt. However, production has decreased, due to heavy exploitation and to a disease experienced in summer 1986. Consequently, total production collapsed to only 9 mt in 1988, from the 100 mt normally harvested. Most the Tunisian sponge production, mainly collected by trawlers, is *Hippospongia communis* while *Spongia officinalis* plays only a limited role.

Table 2. World production of sponges (in mt) from 1980 to 1988.

Country	1980	1981	1982	1983	1984	1985	1986	1987	1988
Tunisia	74	84	129	100	95	100	100	80	9
Cuba	45	47	49	45	51	53	53	58	57
Greece	31	47	38	30	31	35	35	30	16
Philippines	74	38	48	36	21	10	10	6	5
Turkey	10	24	9	2	3	13	15	25	25
TOTAL *	234	230	273	217	206	301	335	360	27

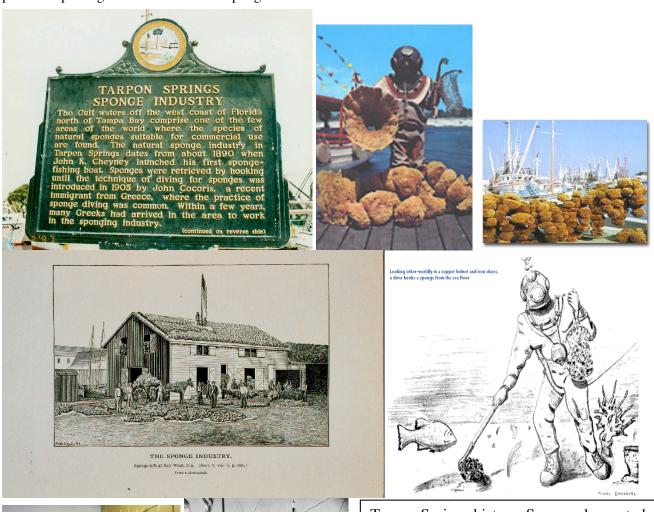
^{*} Including others.

Greece is the second major Mediterranean sponge producer and traditionally the centre of the Mediterranean sponge fishing industry. As Greek waters became depleted at the beginning of the century the Greek fleet started to exploit waters off Egypt, Libya and Tunisia. In recent years, these countries started to prohibit access to Greek trawlers and consequently Greek sponge production declined to the present 15 – 30 mt. In the 1970's Greece still controlled much of the international market and imported raw sponge from other Mediterranean countries, which were then prepared for export. However with the entry into the EEC, the role of Greece as a sponge refiner declined, with France replacing Greece as the main sponge processing country. France has an important sponge collecting industry with 36–46 mt produced annually.

The sponge from the Caribbean is not very well accepted on the market. But during the sponge crisis in 1987/88, Caribbean countries took full advantage of this situation: Total production increased from 62 mt in 1985 to 140 mt in 1988, especially the U.S.A. reported important production increases: 5,500 mt in 1985 up to 53,000 mt in 1988.

FLORIDA'S SPONGE PRODUCTION: Tarpon Springs, FL

June 1905, Greek immigrants began the 1st mechanized sponge harvesting in Tarpon Springs, Florida. Sponge collectors were 200 pound metal and cloth diving suits and were able to harvest 1000s of sponges. Soon after, more Greek immigrants arrived to aid in the booming industry. Tarpon Springs became known for its sponge collection and manufacturing worldwide. The industry slowed in the 1940s with the advent of cheap and easily produced plastics replacing the need for natural sponges.





Tarpon Springs history. Sponges harvested from the Gulf. Drying. In old times laid out to dry in a barn. Collecting in early 1900s. Sponges netted and ready to export. President Harry Truman is gifted with sponges.

QUESTIONS TO ANSWER: (Write out answers in complete sentences.)

- 1. How is sponge collecting a profitable market and where is it most profitable?
- 2. Why do you think there is still a market for natural sponges when plastic is so easily made & cheap?
- 3. How do you think advances in scuba wear might have influenced this industry?
- 4. What is trawling & why is it a problem for the reefs and sponge beds of the world.
- 5. Describe the process in your own words of manufacturing sponges.