

Information Sheet No. 3

HISTORY OF THE QUEEN CONCH FISHERY

The queen conch fishery dates back to the pre-Columbus period of the Arawak and Caribe Indians. These early civilizations utilized the shell as a horn for religious ceremonies, for trade and ornamentation, as well as for bracelets, hairpins, and necklaces. Archeologists have also found remnants of conch shell pieces that were used as tools, possibly to help hollow out large trees used as canoes. The tasty meat was a source of protein not only for the early civilizations, but also for the incoming European settlers. The new settlers would eat the conch meat raw, marinate it in vinegar for salad, fry it, or dice it for chowder and conch fritters. The conch meat was sold all over the Florida Keys and soon became a symbol of the history and the culture.

However, for more than 25 years, the delicious conch consumed in Key West, and everywhere else in the US, has had to be imported from various Caribbean countries. That's because the Florida commercial and sport conch fisheries had completely collapsed by the mid 1970s. Commercial harvest of queen conch in the Keys was banned in 1975, and a ban on all commercial and recreational harvest of the species was enacted in 1986. The queen conch was also added to Appendix II of the CITES (Convention on International Trade in Endangered Species) regulations in 1992. This helps ensure that populations of queen conch are harvested at a rate consistent with its population growth.

The traditional queen conch market has been for adult animals (>16 cm (6.3 inches) shell length), consumed as food. Today, a secondary consumer market exists based on sale of the beautiful shells of adult queen conch, although this market is often filled as a byproduct of conch harvest for food. Novel markets for conch products are also beginning to emerge as a result of developing conch aquaculture programs. There is a demand by the marine aquarium trade for small (2.5 cm, 1 inch) tank-sized animals. There is also an effort to expand a niche market for 'ocean escargot', which are conch of approximately 6 cm (2.4 inches) shell length reared and sold for human consumption. Animals ranging from 7 to 9 cm (2 – 3 inches) are preferred for use in stock enhancement efforts because their relatively large size affords them a degree of protection from crabs, rays, turtles, octopi, and other would-be predators.

Although conch has been the basis of local subsistence fisheries in many Caribbean islands for centuries, queen conch populations are in decline throughout their range, unable to keep pace with the growing pressure of commercial harvest. The animal is slow to mature, taking three to four years to grow to harvest size in the wild. Likewise, the development of improved diving gear, freezer storage, and habitat degradation add to the decline of the fishery throughout its region.

Though still showing signs of overharvest, queen conch populations in the Bahamas and some Caribbean countries are in somewhat better shape, partly due to restrictions, which prohibit the use of scuba gear by conch fishermen. This allows the survival of small, deepwater "refuge" populations, ensuring some reproduction to replenish the regional

stocks. In the Florida Keys, the local spawning stock has been slow to recover. Scientist at the Florida Fish and Wildlife Conservation Commission (FWC) found that there is little larval recruitment to the Florida habitats. Due to these findings, they believe that there needs to be an effort to increase the local spawning stock so their cohorts can rehabilitate the population. The FWC along with The Nature Conservancy utilize volunteers from the community to assist with the scientific surveys, transplants, and restocking research.