

ABSTRACT

An Assessment of the Queen Conch (*Strombus gigas*) Stock Status of the Turks Bank and the Feasibility of Expanding the Fishery as an Export Industry for the Turks and Caicos Islands

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Queen conch is the second most important export resource in the Turks and Caicos Islands, with an ex-vessel value of more than U.S. 1.5 million dollars and a market value of more than U.S. 3.2 million dollars at the current annual export level of approximately 720,000 kg.

Despite the economic value of queen conch, large scale commercial exploitation of this product has transpired almost exclusively on the Caicos Bank, while the Turks Bank has remained relatively underexploited. Less than 15 registered fishers operate full time on the Turks Bank, providing products to local restaurants and for subsistence use.

The Turks Bank is situated to the east of the Caicos Bank, separated by a deep water passage. The partial isolation of the queen conch stocks on the Turks Bank,

suggests the need for a management plan which is independent of that for the Caicos Banks, guided by an independent assessment of the stock status on the Turks Bank.

Nevertheless, it is the objective of the Government of the Turks and Caicos Islands to expand the queen conch fishery of the Turks Bank, to facilitate the export markets of the United States and possibly Europe.

This study was geared primarily at determining the potential exploitable yield of queen conch on the Turks Bank which can be harvested without adversely affecting the stock. A secondary aim of this study was to assess the potential biological, economic and social impacts (if any) on the resource and resource users by the introduction of a 'Class A' fish processing facility to the island of Grand Turk, which would principally cater for the export markets.

The results from a visual abundance survey generated several potential yield estimates, however, this study recommends that the most conservative estimate of 9.46 MT of conch be used in setting the harvesting limit for the queen conch fishery of the Turks Bank.

Additionally, the study also indicated that the introduction of a 'Class A' processing plant can have some positive as well as some negative impact on the resources and resource users of the Turks Islands. Most importantly, the conch resource of the Turks Bank is not sufficient to support both the resident and visiting tourist population, as well as accommodate the export market.