CITES & LIVELIHOODS CASE STUDY 2022

Queen Conch fishing and trade in St Vincent and the Grenadines

SPECIES, USE AND TRADE

The Queen conch (*Strombus gigas*) is a large sea mollusc, found throughout the Caribbean Sea, Gulf of Mexico and some parts of the Atlantic Ocean. Reaching up to 30cm in shell size, Queen conch is harvested and traded both domestically and internationally (with the US accounting for 70% of this) for its meat, shell, and other bi-products such as operculum and, occasionally, pearls.

Known locally as Lambie, Queen conch has been fished in Saint Vincent and the Grenadines since humans have inhabited the islands. It accounts for nearly two-thirds of all fisheries exports generating over US$3 million in 2020. The commercial harvest is largely artisanal conducted by 3-person teams in small boats. Due to the decline in near-shore stocks, harvest is now typically conducted at depths of between 60-100 feet, requiring the use of scuba tanks. Divers will descend to the sea floor and gather the slow-moving Queen conch into a sack which is then hauled up with a rope or "floated" to the surface using a buoy.

The conch meat is removed from the shell of the conch by the fishers, either on the boat or at fishing landing sites. This meat is then sold on to local vendors and larger processors, who remove the inedible parts of the conch meat (operculum, digestive sack and eyestalks), and process it into conch fillets for export – primarily to the US but also to regional markets such as Trinidad and Tobago, Saint Lucia and Dominica.

Saint Vincent and the Grenadines is notable for the commercialisation and use of bi-products in addition to conch fillets. This includes trimmings – made into fritters, burgers and chowder; operculum (the horny "nail" or "foot") and pearls which, while rare, are extremely valuable at US$ 2000 each.

The amount of conch landed in Saint Vincent and the Grenadines has expanded significantly in the last decade but particularly in the last 5 years due to the opening of an international airport that allowed for direct export to the US.

ST VINCENT AND THE GRENADINES

QUEEN CONCH
(Strombus gigas)

APPENDIX II

NOT ASSESSED

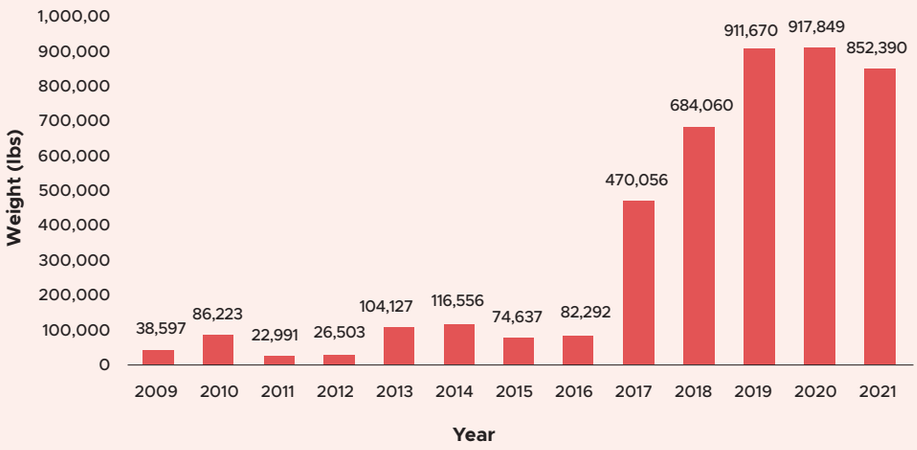
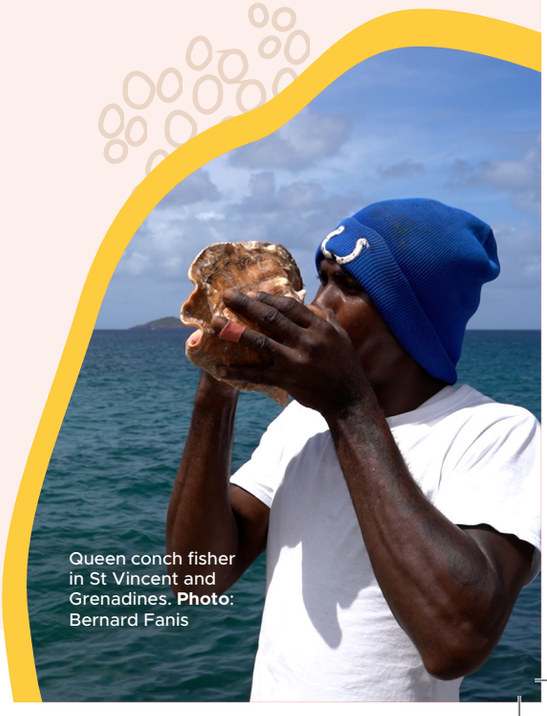


Figure: Trends in landings of Queen conch. Export trends mirror landing trends



Queen conch fisher in St Vincent and Grenadines. **Photo:** Bernard Fanis

LIVELIHOOD BENEFITS

Queen conch harvest and trade provides significant direct and indirect employment and foreign exchange to the national economy of Saint Vincent and the Grenadines, but is particularly significant for the local economy of the islands of Bequia and Union. Approximately 130 people are involved in conch harvesting – predominantly men due to the demanding and dangerous nature of the job. Conch fishers generally undertake 4 trips a week, generating approximately US$400 per trip of which 1/3 goes to the diver, 1/3 to the boat owner and the remaining 1/3 split between the boat captain and boat hand. Women make up the majority of the approximately 120 people involved in the post-harvest phase.

The islands where Queen conch fishing primarily occurs, are remote, and have limited on-island opportunities for employment beyond tourism. Given the volatility of the tourism industry, conch fishing offers local people socio-economic resilience as an alternative source of income and employment. It also has cultural value, particularly on Union Island, where fishers are called 'conch men' and an annual conch festival is held. Conch harvesting and processing draws significantly on, and helps to preserve, local traditional knowledge.

Conch fishing boat in St Vincent & Grenadines. **Photo**: Alexander Girvan.

Queen conch. **Photo**: Alexander Girvan.

CONSERVATION IMPACTS

The value of the international trade in Queen conch has put pressure on populations. Historically it could be found in near-shore areas, but exploitation has meant that these resources have been depleted. Fishers practice traditional methods of managing fishing pressure including rotating fishing grounds and not harvesting juvenile conch but more regular stock assessments and exploration of other management measures such as quotas and restocking of wild populations through the establishment of a nursery will be necessary to secure the long-term sustainability of the resource.

This will be particularly important in the context of climate change since rising ocean temperatures and acidification of ocean waters will likely have a negative effect on Queen conch populations.

CITES regulation has significantly reduced the illegal trade in Queen conch and other species. A combination of CITES regulations and the implementation of a CITES/UNCTAD/OECS "Blue Biotrade" project has resulted in enhanced application of sustainability principles and greater investments in local stock assessments to make future management decisions regarding the management of the resource in order to maintain the economic value that it is generating. The CITES data collection requirements for Queen conch are not only critical to the management of this fishery, but also facilitates data collection and management of non-CITES species.

LESSONS LEARNED AND FUTURE DIRECTIONS

The development of simplified NDF methods and other ways to make Queen conch stock assessments cheaper (such as pooling resources amongst neighbouring countries to conduct such stock assessments) has been an important strategy for enhancing sustainable management.

Climate change presents not just a challenge to Queen conch survival but also to the trade. It has resulted in increased rainfall variability in the islands which has put pressure on freshwater resources that are critical in the cleaning and processing of the conch. The increased frequency of extreme weather events also poses a persistent risk to coastal infrastructure and landing sites that are important for Queen conch value chains.

International, regional and local collaboration including between CITES, UNCTAD and OECS has been fundamental to the success of the BioTrade project and will likely be a major factor in the long term success of the Queen conch fishery.

Case study prepared by Alexander Girvan. **Edited by** Dilys Roe.

IN COLLABORATION WITH:

IUCN CEESP SSC Species Survival Commission SULi Sustainable Use and Livelihoods Specialist Group

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