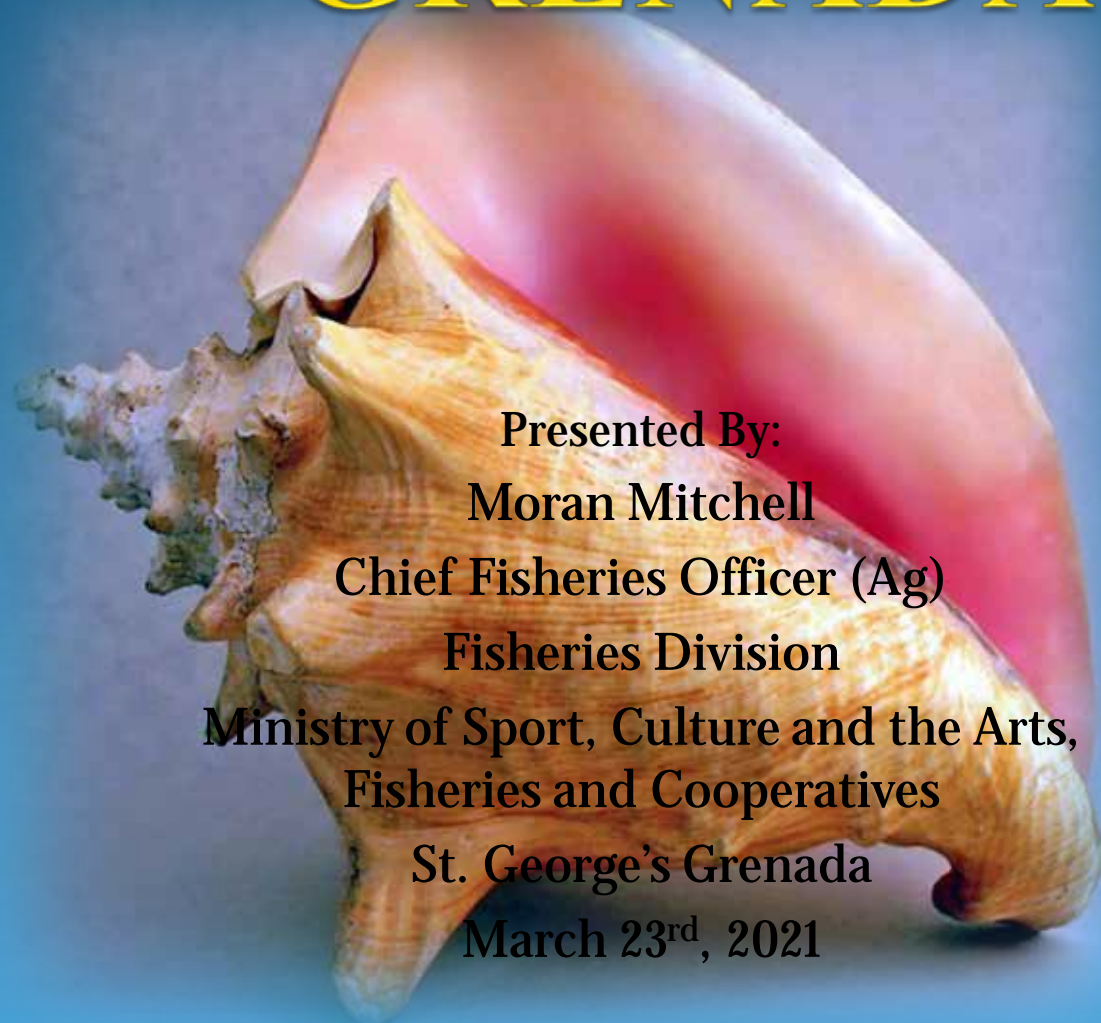


THE CONCH INDUSTRY IN GRENADA



Presented By:
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Ministry of Sport, Culture and the Arts,
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St. George's Grenada
March 23rd, 2021

OVERVIEW OF GRENADA CONCH FISHERY

PRESENTATION ON THE QUEEN CONCH (STROMBUS GIGAS) IN GRENADA, CARRIACOU AND PETITE MARTINIQUE

The Queen Conch otherwise known as Lambi is a Coastal as well as deep water shell fish. The Conch Fishery in Grenada dates back since 1957. During this period Artisanal Fishermen in small wooden canoes will used oars to propel their vessels to go on the fishing ground to harvest Conch.

The distances for harvesting this lucrative specie ranges from 100 meters to 300 meters off shore. Free diving was conducted during this period. The depth for harvesting conch during this period was ranged from 10 feet to 30 feet of water. Fishing for Conch was predominately focused on the East and South East Coast of Grenada mainland and South East of Sister Isles Carriacou and Petite Martinique.

As the sector developed, it becomes obvious that the Conch Fishery ranked in 5th position among the other method of fishing in Grenada. As such the fishery became relevant especially for the fishers that was on the East Coast of Grenada and especially those in Carriacou and Petite Martinique.

- Grenada Conch Fishery has developed over the past 30 years.
- Fishermen who now harvest Conch do so by the use of oxygen dive tanks.
- The Conch fishery has a cross section of young fishermen who has entered the industry over the years.

- Over 90 to 105 fishers are now engaged in the harvesting of Conch on mainland Grenada, Carriacou and Petite Martinique.
- Over 35 small scale fishing vessels, 6 meters in length represents the fishing fleet.
- Over 75% of fishers are trained in the used Scuba gear which affords them to harvest Conch in the depth of water up to 60’.

–As there is no legislation as it relates to a Closed Season for Conch. Over 60% of Fishermen will harvest Conch during the months September to April. (year round, but mostly diving)

METHODOLOGY OF HARVESTING CONCH

- On arrival on the fishing ground, the main diver will descend to the depth of 40' to 100' depending on the tidal and current conditions.
- A wire mesh basket with extended rope from the vessel will be slacked to the sea bottom where the diver will harvest Queen Conch are then placed in the basket – A wire mesh size basket can hold up to 25 mature conch.
- A poly buoy will be attached to the rope which will facilitate smooth floating of the wire mesh basket to the boat. The conch will be received from the basket by the boat man and placed inside the vessel.
- This process can continue until the diver ascend to the top to changes his oxygen tank or if the fisherman are satisfied with their catch on hand.

FISHING TIME: Fishermen depart from shore to the fishing ground at about 6:00 A.M. daily, and arrived back on shore about 2:00 P.M.. (this arrival time on shore is heavily dependent on the distance and the weather condition at the time.

SIZE LIMIT: The fishermen in Grenada and its territories are well aware of the size of the conch that should be landed. Though there are no legislation as it relates to Closed Season – fishers are well informed of the size limit of the conch they should harvest. Any immature conch will be seized by the fishing inspectors.

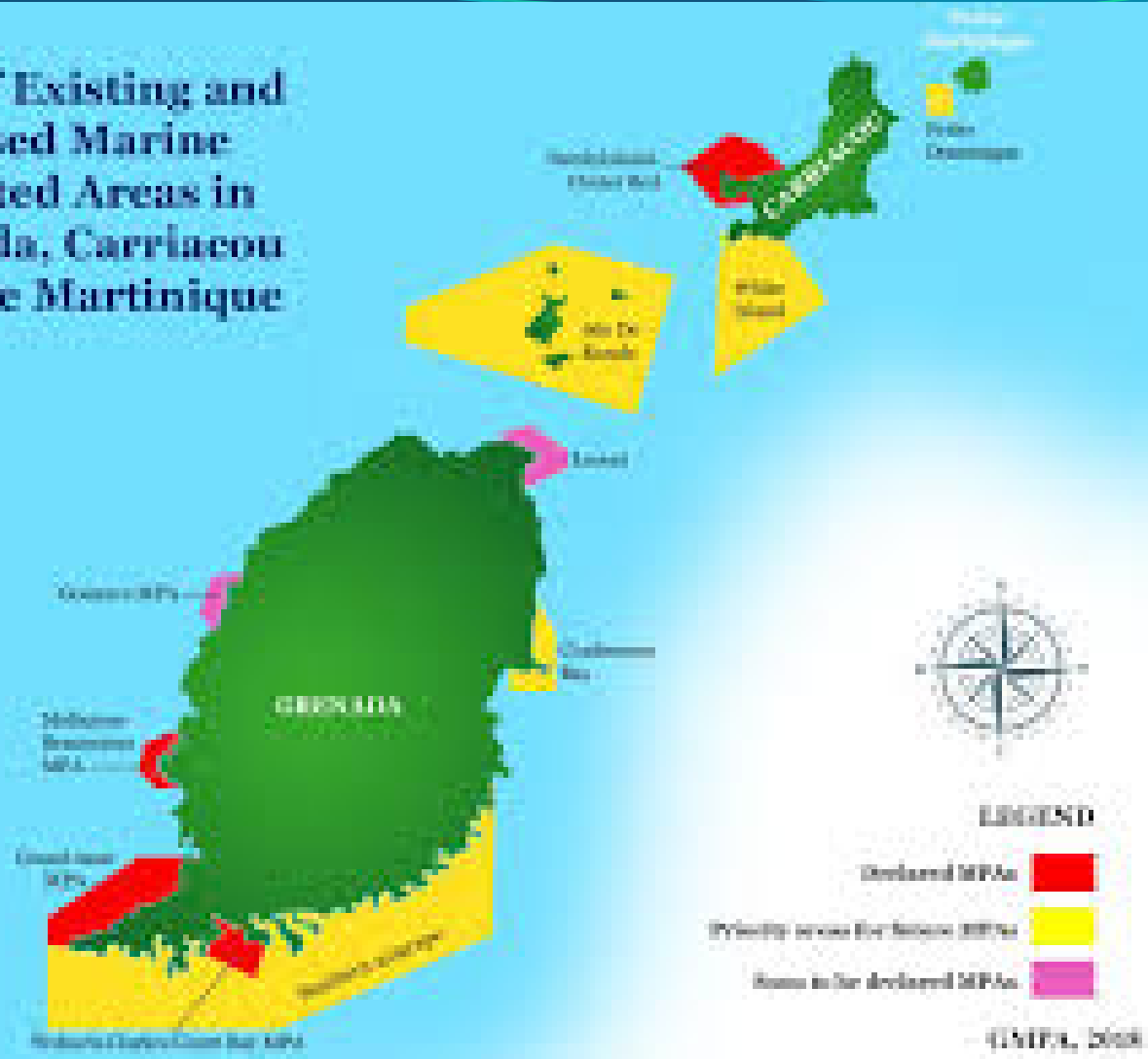
- ECOLOGICAL VALUE:** As a shell fish, the conch dwells on grassy habitats , and are well adapted to a tropical environment, which they feeds and spawn and plays a very vital role as a in their respective ecosystems.
- In the value chain for other marine organisms, juvenile conch are predates by other marine species, such as sting rays, sharks, and octopus.

MARINE PROTECTED AREAS

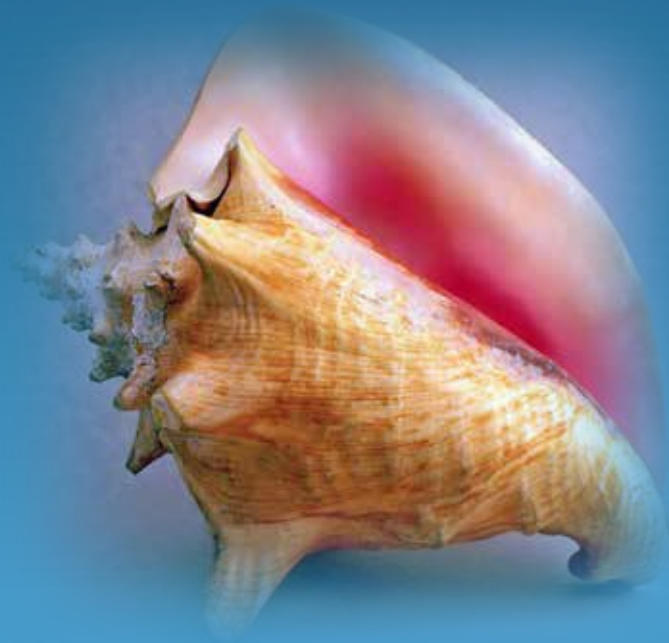


–Grenada has declared 4 designated areas as MPA, it is evident that most of the MPA are predominately located on the West Coast of Grenada. As such these protected areas do not pose any serious or immediate threat to the conch industry. As was mentioned before that Conch are harvested on the East and South Eastern banks of Grenada.

Map of Existing and Proposed Marine Protected Areas in Grenada, Carriacou & Petite Martinique



LAMBI (CONCH)



GEOGRAPHY OF THE CONCH FISHERY

– Main Fishing Communities;

Isle De Rhone

Sauteurs

Grenville

Calliste

Woburn

Petite Bacaye

Fort Judy

Carriacou

Petite Martinique

STOCK LOCATION;

East and South East of Grenada

MAIN MARKETS (Local and Export)

Local: Restaurants, Hotels, Supermarkets

Export: Trinidad

ECONOMIC IMPORTANCE

- The Queen Conch ranks as the 3rd specie of seafood that is exported. Due to CITES restrictions it becomes difficult for Queen Conch to be exported to certain countries. Having said so a small quantity of conch are exported to the Republic of Trinidad and Tobago.

Production and Export Data of Conch - 5 year period:

Annual Production

Grenada, Carriacou & Petite Martinique

Year	Quantity (lbs)	Value (xcd)
2017	52,337.72	\$ 389,613.28
2016	54,016.20	\$ 391,079.85
2015	65,497.14	\$ 452,089.75
2014	58,894.73	\$ 400,800.93
2013	86,277.28	\$577,494.06

Annual Export

Grenada, Carriacou & Petite Martinique

Year	Quantity (lbs)	Value (xcd)
2017	19,080.00	\$ 254,718.00
2016	20,880.00	\$ 191,385.00
2015	40,842.73	\$ 391,207.24
2014	25,012.76	\$ 329,205.75
2013	33,893.00	\$ 374,365.00

ENFORCEMENT

- LICENSING OF CONCH FISHERS, PROCESSORS AND EXPORTERS:
- In relationship to the Regional Queen Conch Management and Conservation Plan: Grenada Fisheries Division has taken the bold step to register and licence ALL Queen Conch Fishers, Processors and Exporters.
- A robust enforcement MCS operations both in primary and secondary sites, to ensure that, no immature conch are being harvested and landed.
- Continuation of outreach and educational program for stakeholders throughout.

HEALTH OF THE FISHERY

- Due to the many reports obtained from fishers, it is ok to say, but not definite or conclusive, that the Grenada Conch Fishery, is dynamic and Healthy. It is of our concerns however, that though these reports comes from the fishers themselves, there is no scientific analysis or findings or to verify these reports.
- Based upon the limited amount of conch landed – due to CITES restrictions and the decline of investors wanting to invest in this particular fishery, it can be concluded that the fishing effort for Queen Conch especially on the mainland Grenada has decline tremendously.

GOVERNANCE

– Government Institutions:

Ministry of Health – Competent Authority

Ministry of Trade

Ministry of Agriculture

Ministry of Sports (Fisheries Division)

Focal point: Ministry of Agriculture (Forestry Department)

–LEGISLATION:

The Grenada Fisheries Act of 1986 is the parent law that addresses the development and management of Fisheries and the regulations of fishery and fishing related activities in Grenada.

The Act is based on the OCES harmonized legislation for;

1. Regulating the processing of fishing products.
2. Regulating the exportation of fishing products among others.

The Act gives the Minister of Fisheries the authority to create new regulations so and to ensure the optimum utilization of the Fisheries resources in the fishery waters of Grenada.



PUBLIC NOTICE

**THE PUBLIC IS HEREBY REMINDED
THAT ACCORDING TO
FISHERIES (AMENDMENT)
REGULATIONS # 24 OF 1996,
NO PERSON SHALL TAKE, PURCHASE OR
HAVE IN HIS POSSESSION,
ANY “IMMATURE CONCH”.**

In this Regulation **“immature conch”** means:

- (a) A conch the shell of which is smaller than 18 centimeters (9 1/4 inches) in length; or
- (b) A conch the shell of which does not have a flared lip; or
- (c) A conch with a total meat weight of less than 225 grams (8 ounces) after the removal of the digestive gland.

**PLEASE REPORT ANY INCIDENCE
OF ILLEGAL CONCH FISHING TO
THE NEAREST POLICE STATION OR
THE FISHERIES DIVISION AT
440-3814**

FISHERIES DIVISION
MINISTRY OF AGRICULTURE, FORESTRY AND
FISHERIES
MINISTERIAL COMPLEX, TANTEEN,
ST. GEORGE'S, GRENADA.

PHONE: +473-440-3814/2708
EMAIL: fisheries@gov.gd

Queen Conch (*Strombus gigas*) Fishery Regulations



Fisheries (Amendment) Regulations SRD No. 24 of 1996

Part VI Section 18: Conch

1. No person shall take, sell, purchase or have in his possession any "immature conch";
2. The Minister may by notice published in the *Gazette* and in a newspaper printed or circulated in the State declare any period as a closed season for conch;
3. No person shall fish for conch during the period of the closed season;
4. In this Regulation "immature conch" means:
 - (a) a conch the shell of which is smaller than 18 centimeters (9 1/4 inches) in length; or
 - (b) a conch the shell of which does not have a flared lip; or
 - (c) a conch with a total meat weight of less than 225 grams (8 ounces) after the removal of the digestive gland.

Conch is locally known as "Lambie"

IMMATURE CONCH

- Less than 18 cm. (9 1/4 ins.) in length
- Does not have a flared lip
- Conch meat weighs less than 225 grams (8 ounces)



X

MATURE CONCH

- More than 18 cm. (9 1/4 ins.) in length
- Has a flared lip
- Conch meat more than 225 grams (8 ounces)



✓

REPORT INCIDENCE OF ILLEGAL FISHING TO
THE NEAREST POLICE STATION OR THE FISH-
ERIES DIVISION AT 440-3814/2708

MAIN CHALLENGES

Main Economic Challenge:

The main challenges that are presently faced in Grenada as it relates to the Conch fishery is Exportation of the Conch. This challenge remain the number one stumbling block to this fishery due to the sanctions imposed upon Grenada by CITES. As a result it is virtually impossible to export Conch to certain countries where the demand for this lucrative shell fish is huge.

However, it must not be forgotten that CITES imposition is not without merit. Once Grenada fail in its reporting requirements it is expected that such sanctions will be imposed, (Grenada at this moment have understood the gravity of this situation and is NOW working towards having this problem resolved once and for all.

Environmental Challenges:

- As it relates to environmental; challenges, Grenada Conch Industry do not possess any biological, nor physical hazard to the environment. Fishers are very cognizant of the environment and will do everything in their effort to reduce all aspect of pollution relating to this industry. The shell of the conch are sold on the local market to tourist and also use as a audio distress signal in case of an emergency out at sea. It is also used to alert the consumers of fish sales. Besides the above, conch shell are widely used during International cricket tournaments, and during carnival festivals.

Compliance and Administrative challenges

- Among everything else the fishers that are engaged in the conch fishery in Grenada are in total compliance as it relates to the regulations that governs the harvesting of conch. In the past 18 years the challenges were greater due to the lack of community based information. However, fishers have recognized that there are tremendous benefits and opportunities once they complies to the regulations .
- Administratively, the Fisheries Division as was indicated before have had a rigid MCS program where beach landings sites of conch are being monitored by Extension Officers. The consistency of this monitoring system created a deterrent for fishers who might have been tempted to land undersize conch. Also local buyers such as supermarkets, hotels and restaurants were trained in size limitations and were advised that they should buy conch at the stipulated regulatory size. Thus once the fishers cannot get immature conch sold to these institutions, they exhibit a high level of compliance.

– In the face of these challenges it must be reported that the Ministry is making all the necessary efforts together with Foreign Affairs to seek the expertise of professional divers to conduct an audit of the Queen Conch stocks in our territorial waters.



OPPORTUNITIES

- Grenada will like to capitalize on the export trade operation.
- As it relates to technology, the conch industry is being monitored by Extension Officers. Officers are responsible for the inspections of conch landing sites as well as inspections before exporting. As it relates to enforcement of the Fisheries laws and regulations, again designated Fisheries and Coast Guard Officers will collaborate together in order to initiate any enforcement on the sea, there are reasons to believe that an offence have been committed in the harvesting of the Queen Conch.
- The fishing vessels that are engaged in the harvesting of Queen Conch are artisanal in nature. These vessels are powered by outboard motors. They must be registered and licenced in order for them to be engaged in harvesting the Queen Conch.
- As it relates to safety, all fishing vessels that are involved in the conch fishery must adhere to the safety regulations and requirements, these vessels must carry on board their fishing vessel at all times the Basic Safety Equipment requires by the fisheries regulations. As it relates to catching of Parkinson Disease (the bens) most of Grenada divers that are engaged in this fishery are certified scuba divers. They will follow the safety diving protocols but at times reports will surface that a diver contracted Parkinson disease.

- As it relates to markets Grenada cannot boast itself of having a variety of markets to export too. This however, is restricted due to Grenada being on Appendix II. Grenada Conch Fishery has the potential to grow and to explore market accessibility but are being hindered at the moment.

MEAT CONVERSION

- In the Queen Conch fishery the main concern is the fillet that derives from the conch meat, or the muscular of the gastropod
- As it relates to the conversion factor. In the Grenada context we adopt this conversion based upon the final inspection of the product with the expectation to view a totally clean meat (110%).

PROCESSING GRADE	PROCESSING DEFINITE	CONVERSION FAIL
Dirty Meat	Animal without shell	5.3
60% Clean	Removal of operculum (claws and Visceral bag)	7.9
100% Clean	Only white meat remains	

Grenada has recognized the need to engineer the meat conversion factor to a level that will meet Local, Regional and International acceptability.

VINEYARD LTD WHICH IS A CERTIFIED FISH EXPORT LICENCE HOLDER IS PRESENTLY OPERATING FROM THE GOUYAVE FISH MARKET COMPLEX IN GRENADA

THE COMPANY HAVE AQUIRED A RANGE OF EXPERIENCE AND EXPERTISE IN THE DEVELOPMENT OF THE QUEEN CONCH FISHERY AS WELL AS THE SPINY LOBSTERY FISHERY.

PHOTOS SHOWING THE PROCESSING OF THE CONCH IN THE INITIAL STAGE WITHOUT THE SHELL FOR THE PURPOSE TO ARRIVE AT THE MEAT CONVERSION FROM THE ANIMAL WITHOUT SHELL TO 100% CLEAN (only white meat remains)

















HYPERBARIC CHAMBER ST. AUGUSTINE MEDICAL SERVICES (SAMS) GRENADA











VESSELS ENGAGED IN HARVESTING CONCH







CALLISTE FISHERMAN DISPLAYING PROPER LAMBI SIZE



Cleaning of Conch by fishers on the landing site









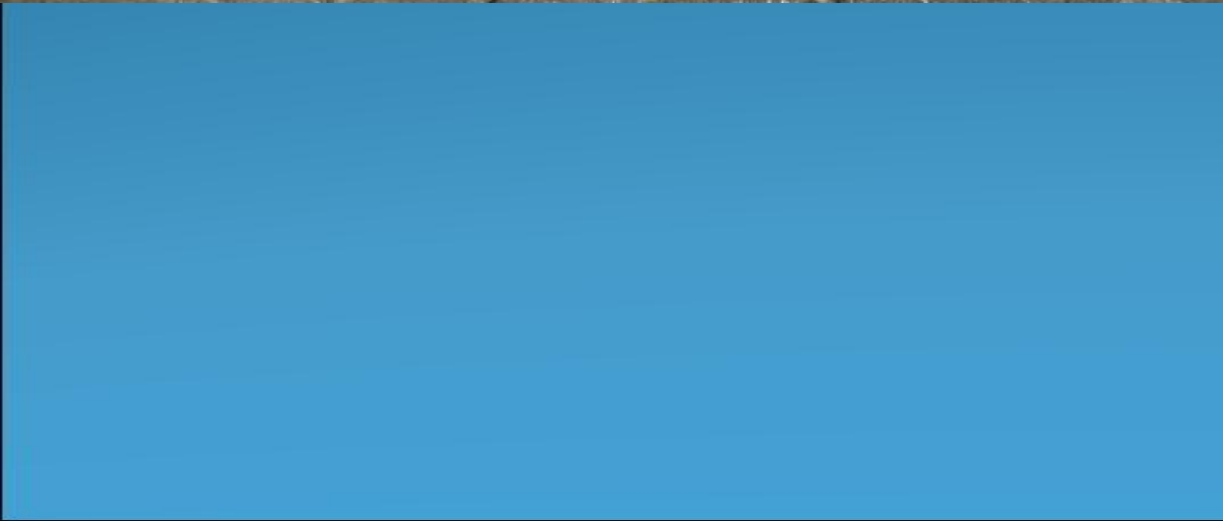






Diving tanks used by Conch fishers









Thank you!