

Response to Primary Recommendations Concerning *Strombus gigas* in St. Lucia that were Formulated in the Context of the Implementation of Resolution Conf. 8.9 of the Convention on the International Trade in Endangered Species of Fauna and Flora (CITES)

*Resolution Conf. 8.9: Standing Committee Recommendation (SC41, February 1999) to all Parties to Suspend Imports of Specimens of Queen Conch, *Strombus gigas* from St. Lucia*

Overview

The Government of St. Lucia is dedicated to the sustainable use of marine and coastal resources, and Queen Conch, *Strombus gigas* (Linnaeus, 1758), is no exception. Over the years, the Government has instigated a number of initiatives that demonstrate this commitment, and continues to forge ahead, albeit human, financial, and technological constraints.

The Queen conch is one of the single species nearshore fisheries of Saint Lucia. Over the past two decades, stocks have been overexploited such that most fishers harvest at deeper depths with SCUBA gear. However, to a lesser extent, conch is still harvested with gill nets and by free diving, in areas along the west and southwest coasts (Rambally, 1999). Although this species is thought to be distributed around the island, only two significant populations are recognised, one to the north and the other to the south of the island (Nichols and Jennings-Clark, 1994). The northern population is believed to be more heavily exploited than the southern population.

Prior to 1993, legal exportation of conch was not permitted, but a study on conch consumption in Martinique revealed that illegal exports in the late eighties were in the region of five tons. From 1993, export to this neighbouring territory was permitted, controlled under CITES, in an effort to ensure that exports met legal requirements for size limits and volume restrictions (Department of Fisheries, 2001). However, in 1997, due to the implementation of trade restrictions by the European Union (EU) with regards to health and sanitary controls for fishery products exported to the EU, coupled with the re-opening of the conch fishery of Martinique, legal export to this island ceased. In addition, trade was also restricted because of the CITES Standing Committee recommendation of February 1999 for the suspension of imports of conch from St. Lucia, due to lack of adequate implementation of requirements under Article IV, paragraphs 2 (a) and 3. Unfortunately, all these factors have encouraged a thriving illegal trade for this resource (Joseph, 2001), between St. Lucia and Martinique.

Following are the responses of St. Lucia to the correspondence of September 1997 on *Significant Trade in Animal Species in Appendix II-Primary Recommendations 1, 2, 3 and 7.*

Primary Recommendation No. 1: Biological Basis for Issuing Permits

Conch is exploited commercially year-round by just over forty fishers, in depths ranging from eleven to forty-three metres. Fishers operate out of some fourteen open wooden and fiberglass pirogues, ranging in length from 7.02 – 8.45 metres, powered by outboard engines of 115 – 250 horsepower. Fishers of this resource can be divided into part-time and full-time. Full-time fishers conduct dives on an average of four times each week, alternating harvesting and rest days, whilst part-time fishers operate no more than twice each week (Department of Fisheries, 1999). On a successful expedition, approximately 300–700 individual conch are landed per trip (Joseph, 2001), but this number may be significantly lower for the southern operators. Subsistence exploitation in shallower areas occurs, but the extent is uncertain. The policy of the Department of Fisheries requires that all conch harvested are landed whole. Live conch are then stored in wire-meshed cages in shallow areas close to shore, until sale occurs.

Based on the current situation and the commitment of the Government of St. Lucia to ensure the sustainable use of local conch resources, the following initiatives have been, and continue to be undertaken, in an effort to better control the level and form of fisheries exploitation and potential trade in the species.

- The Fisheries (Turtle, Lobster and Fish Protection) Regulations, Saint Lucia, Statutory Instruments, 1987, No. 67 and the subsequently strengthened Fisheries Regulations, Saint Lucia, Statutory Instruments 1994, No. 9, provide protection for this resource, by prohibiting the harvesting of conch less than 180 millimetres total shell length; less than 1 kilogram total weight; and less than 280 grams meat weight not including digestive glands. In addition, these regulations restrict harvesting of immature conch, defined as individuals without a flared lip. In practice, enforcement efforts have been focused on monitoring for one of these regulations- the harvesting of individuals with flared lips, due to the ease of enforcement and implementation in the field.
- The Fisheries Regulations allow for the establishment of a close season, but to date, this management measure was not deemed necessary. However, a process is underway for the revision and strengthening of the Fisheries Regulations and Act, with technical assistance from the Food and Agriculture Organisation, which includes the initiation of a close season for conch, in line with other regional countries. The new draft Regulations also stipulate the minimum lip thickness.
- A biological data collection initiative for conch, jointly funded by CARICOM (Caribbean Community) Fisheries Research Assessment and Management Program (CFRAMP) and the Government of St. Lucia, commenced in 1996, and ran for a period of two years. The main aim of this initiative was to gather information in order to assess the status of the conch resources of the island, so as to best guide management decisions. Previous to this data collection exercise, the fishery was under recorded and comprehensive information required to make informed decisions was lacking. Detailed analysis for this study remains to be completed, due to manpower constraints in the Data Management Section of the Department of Fisheries during the 1998 to 2000 period. However, preliminary results show that 99.5 percent of conch sampled were mature, that is, they had a lip thickness of more than five

millimetres. This supports the conclusion drawn from previously adopted crude methods (where landings were monitored by examining stockpiles of discarded conch shells), that stocks are believed to be sustaining the current level of fishing (Joseph, 2001).

- Two key management objectives are defined for this resource and are articulated in the *Plan for Managing the Fisheries of Saint Lucia, 2001-2005*. They comprise: (1) rebuilding the near shore stocks and (2) ensuring sustainable use of this resource. Management options identified for attaining these objectives include initiating a flared lip thickness legal restriction, controlling effort through a licensing system, implementing closed areas or seasons and co-management arrangements with resource users. As in the past, the Government of St. Lucia will continue to limit access to the fishery, including the frequency and export of whole, live animals.
- In an effort to effectively manage this resource, a limited entry system has been implemented, restricting entry to this fishery by specific licence requirements, prohibiting the use of SCUBA for fishing, except in the case of vessels specifically licensed to use this gear for conch. Additionally, the Department of Fisheries held training sessions in proper and safe diving practices, conch biology, and resource management, with licensed operators. Through these training workshops, several traditional divers have been certified in SCUBA diving, as they previously operated without any relevant training. A questionnaire has also been administered to assess the socio-economic contribution of the conch fishery and educational work continues with school children and community groups.
- A detailed analysis of the two-year conch biological data collection initiative and socio-economic questionnaire will now be undertaken.
- St. Lucia, with the assistance of the Japanese Government, is currently taking action to meet the health and sanitary requirements of the EU with respect to the exportation of conch. This is being done through the new Fisheries Complex in Vieux-Fort, to the south of the island and is expected to be in effect by June 2002.

Primary Recommendation No. 2: Coordination for the Development and Implementation of a Regional Management Strategy for Sustainable Harvesting

St. Lucia has collaborated and will continue to do so at the regional and international level, to facilitate the development of a regional management strategy for the sustainable harvest of *S. gigas*:

- As mentioned earlier, a conch biological data collection programme, which commenced in 1996 and ran for a period of two years, was initiated between CFRAMP and the Government of St. Lucia. This initiative, which was also undertaken in other islands of the Caribbean, was to gather information for the assessment of the status of conch stocks. While the detailed analysis for this study is not yet complete, this is expected to be undertaken shortly. Results will be disseminated regionally and will factor into subsequent management action.

- St. Lucia will continue to cooperate fully with the Caribbean Fishery Management Council to develop and implement a regional management strategy for the sustainable harvest of conch.
- St. Lucia participates in, and pledges its support to, regional and international meetings, workshops and conferences on Queen Conch, to share information and gain insight into innovative and collaborative methods for the conservation and sustainable use of the resource.

Primary Recommendation No. 3: Measures Taken for the Collection and Use of Relevant Data to Determine Catch per Unit Effort.

The Government of St. Lucia recognises that information on catch per unit effort is essential to monitor trends in the fishery and to allow for appropriate methods to be put in place for the sustainability of the fishery. At present, the limited resources of the Department of Fisheries do not allow for such data to be collected on a continuous basis. However, the analysis of the two-year conch biological data programme between the Government of St. Lucia and CFRAMP and the socio-economic questionnaire will yield useful information. The fisheries data collectors and officers will continue to do bi-annual assessments of shell stockpiles to monitor length frequencies of landed animals. The Government of St. Lucia will also continue to source funding to allow for continuous monitoring of the resource.

Primary Recommendation No. 7: Documentary Requirements and Permit Issuance Procedures for Trade

From 1993, export of conch to Martinique was permitted. Under this system, vessels were required to export only whole animals and were required to operate through procedures stipulated by CITES and only after careful examination of the product by the Department of Fisheries. In addition, approval needed to be sought from the Department of Fisheries, via the completion of a CITES permit for the removal of individual shells from the island as souvenirs. Providing that trade restrictions are lifted, these procedures will be reinstated.

Conclusion

Based on the foregoing, the Government of St. Lucia respectfully requests that the Standing Committee of CITES reconsider the trade restrictions in place for conch import from St. Lucia. Notwithstanding human and financial limitations, the Government of St. Lucia has made considerable strides in managing the conch fishery more effectively; yet the trade restrictions imposed by CITES continue to severely undermine these efforts. There is no longer a legal avenue for fishers to follow, and harvesting and covert export to Martinique now continues relatively unconstrained and unmonitored. Monitoring is also made worse by (1) the limited surveillance capacity of the Marine Police Unit and Department of Fisheries; (2) the isolated location of the harvesting grounds; and (3) the fact that there appears to be limited control at the level of the French authorities.

In view of the efforts being made to conserve and sustainably manage this resource; given that illegal harvesting has become prevalent since the imposition of the trade restrictions; the Government of St. Lucia seeks favourable consideration of this proposal. The Government remains committed to working with the French authorities and all relevant regional and international bodies, to ensure that effective management controls remain in place for this valuable marine resource.

References

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Annex 1: Extract from the Plan for Managing the Fisheries of St. Lucia: 2001-2005.

Management Plan for CONCH



Target Species	<ul style="list-style-type: none"> ▪ Queen Conch (<i>Strombus gigas</i>)
Life History	<ul style="list-style-type: none"> ▪ <i>Distribution</i> - Larvae are planktonic for about three (3) weeks; juveniles inhabit shallow coastal habitats such as seagrass, and sandy bottoms in protected bays where they remain buried in the substrate. Adults prefer similar habitats in deeper water. ▪ <i>Growth</i> - Shell length stops increasing at the onset of sexual maturation typically at an age of about 3-3.5 years. At this time the shell develops a characteristic flared lip. Shell weight and flesh weight continue to increase after lip formation. Lip thickness increases with age. ▪ <i>Mortality</i> - Maximum life span is about seven (7) years. ▪ <i>Spawning</i> - The spawning season has not yet been documented in St. Lucia. In other areas spawning has been observed between March and November. Females may copulate with several males and store the sperm for several weeks prior to spawning.
Fishing Methods	<ul style="list-style-type: none"> ▪ This fishery is carried out by SCUBA and free divers usually over shelf areas waters between 20 and 50 m deep. A limited number of fishers participate in this fishery. Most of the catch is sold locally to restaurants and hotels but a significant proportion is illegally exported to Martinique. The number of harvesters has remained relatively stable over the past decade. The DOF has recently provided training in safe diving methods and first aid for conch divers.
Management Unit	<ul style="list-style-type: none"> ▪ Island shelf for juveniles and adults; Eastern Caribbean for planktonic larvae.
Resource Status	<ul style="list-style-type: none"> ▪ Field observations and reports from fishermen suggest that conch are heavily exploited off the north and south coasts. Most divers do not harvest juveniles (below legal size). The conch is particularly susceptible to over-fishing because it is sedentary and aggregates in specific habitats. The potential yield is 31 MT/year (Source: FAO Fisheries Technical Paper 313).
Catch History	<ul style="list-style-type: none"> ▪ Estimated total landings in 2000 were 40.3 tons of whole catch (Source: Department of Fisheries).
Current Regulations	<ul style="list-style-type: none"> ▪ Size restrictions <ul style="list-style-type: none"> ○ Minimum shell length and meat weight. ○ Harvesting only flared lip conch permitted. ▪ Close season (provisions are in the regulations but this option has not been established as yet). ▪ Exports should only occur under the CITIES restrictions and EU/HACCP standards for fishery exports. ▪ Only whole animals can be landed (policy; not a legislated requirement). ▪ Use of SCUBA gear restricted to specially licensed fishers.
Management Objectives	<ul style="list-style-type: none"> ▪ Rebuild stocks, particularly nearshore; ▪ Ensure sustainable use of resource.
Management Options	<ul style="list-style-type: none"> ▪ Initiating a flared lip thickness restriction; ▪ Control effort: licensing system; ▪ Closed areas/seasons. ▪ Co-management arrangements.

Action Plan for CONCH



Issues	Action	Implementation Strategy	Resources Required
Potential overfishing	<ul style="list-style-type: none"> More rigorous enforcement of existing regulations and licensing scheme. 	Amend existing regulations to revise minimum size to lip thickness only; Restrict landings to live/whole animals.	Manpower, resource persons; surveillance assets; \$.
Habitat degradation and destruction	<ul style="list-style-type: none"> Control land-based sources of pollution and coastal development. 	Develop and implement legislation that makes EIAs mandatory.	\$. Resource person(s)
Unknown extent of conch habitat	<ul style="list-style-type: none"> Initiate efforts to map the critical habitat of conch to refine estimate of potential yield. 	Conduct habitat mapping study. Involve harvester in surveys.	\$. Resource person(s).
Depletion of conch stocks	<ul style="list-style-type: none"> Implement marine reserves that comprise seagrass areas serving as critical conch grounds. 	Conduct studies to determine the location of key seagrass beds which serve as important conch habitat. Restrict effort through community-based management.	\$. materials, equipment; Resource persons; Manpower.
Inadequate resource and fishery data	<ul style="list-style-type: none"> Re-initiate collection of biological data and improve the collection of catch and effort data. 	Support biological data collection efforts; Involve harvesters in data collection efforts.	Data Personnel
Existing limitations prevent meeting international market requirements.	<ul style="list-style-type: none"> Acquire EU compliance to resume legal, controlled export of conch to Martinique. Review pricing and marketing systems for conch. 	Assist marketing establishments to become EU approved, compliant and certified. Use collaborative framework for addressing constraints.	\$. resource persons, laboratory and inspection capabilities.

Annex 2: Extract from the Fisheries (Turtle, Lobster and Fish Protection)
Regulations, St. Lucia Statutory Instruments 1987, No. 67

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Fisheries (Turtle, Lobster and Fish Protection) Regulations

- (b) less than 9.5 centimetres (3.75 ins.) in carapace length measured from the ridge at the base of the horns to the end of the carapace (back shell); or
- (c) if the tail has been removed, a tail weight of 340 grammes (12 oz.).

4. Prohibition against disturbing, removing from the fishery waters or being in possession of turtles.—(1) No person shall:

- (a) disturb, remove from the fishery waters, expose for sale, sell, purchase, or at any time have in his possession any turtle eggs;
- (b) interfere with any turtle nest, or turtle that is nesting;
- (c) remove from the fishery waters, expose for sale, sell, purchase, or at any time have in his possession any undersized turtle;
- (d) set within 100 metres of the shores of Saint Lucia any net or seine or any other artifice for the purpose of or with the intention of fishing for, catching, or taking any turtle; or
- (e) fish for, remove from the fishery waters, or at any time have in his possession, expose for sale, sell or purchase any turtle or part thereof between the 28th day of February to the 1st day of October in every year, or as otherwise stated by the Minister by notice published in the Gazette and in a newspaper which is printed or circulated in the State.

(2) In this Regulation "undersized" means a weight less than:

- (a) 30 pounds for Hawksbill (*Eretmochelys imbricata*), Green (*Chelonia mydas*) and loggerhead (*Caretta caretta*) turtles; or
- (b) 120 pounds for leatherback (*Dermochelys coriacea*) turtles.

5. Prohibition against taking possession of corals and sponges. No person shall take, collect, have in his possession or damage any coral or sponges from or in the fishery waters except with the written permission of the Chief Fisheries Officer, and in accordance with any such conditions as the Chief Fisheries Officer may specify.



6. Prohibition against the sale of or taking in possession of any conch.—

(1) No person shall:

- (a) take from the fishery waters, sell, purchase, or at any time have in his possession any immature conch; or
- (b) take from the fishery waters, expose for sale, sell, purchase or at any time have in his possession any conch during the closed season for conch as specified by the Minister by notice published in the Gazette and in a newspaper which is printed or circulated in the State.

Fisheries (Turtle, Lobster and Fish Protection) Regulations

- (2) In this Regulation, "immature conch" means a conch with:
- (a) a total weight of less than one kilogramme (2.24 lbs.);
 - (b) meat weight of less than 280 grammes after removal of the digestive gland; or
 - (c) a shell which does not have a flared lip.

7. **Prohibition against the disturbance of sea urchins.** No person shall disturb, take from the fishery waters, have in his possession, purchase, expose for sale, or sell any sea urchins of the species (*Tripneustes esculentes* (white sea egg)) or *Diadema antillarum* (black sea egg), except with the written permission of the Chief Fisheries Officer, and in accordance with any such conditions as the Chief Fisheries Officer may specify.

8. **Scientific Research.**—(1) The Minister may authorize any person or class of persons to perform such acts, for the purpose of engaging in scientific research, which would otherwise constitute an offence under these Regulations.

(2) An authorization given under this Regulation may be subject to such terms and conditions as the Minister thinks fit.

(3) It shall be a defence to a prosecution for a breach of a Regulation that the person charged was authorized under sub-regulation (1) at the time of the alleged offence to perform such acts in respect of which the charge was preferred.

9. **Offences and penalties.** Any person who contravenes any of the provisions of these Regulations shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding five thousand dollars.

Made by the Minister under section 39 (2) of the Fisheries Act, 1984 (No. 10 of 1984), this 3rd day of December, 1987.

FERDINAND HENRY,
Minister.

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Fisheries Regulations

(2) In this Regulation —

- (a) "turtle" includes the whole or any part of any turtle;
- (b) "undersized" means a weight less than —
 - ^{25 lbs} (i) 27.22 kilograms for Hawksbill (*Eretmochelys imbricata*);
 - ^{75 lbs} (ii) 34.02 kilograms for Green (*Chelonia mydas*) and loggerhead (*Caretta caretta*); or
 - ^{134 lbs} (iii) 294.84 kilograms for leatherback (*Dermochelys coriacea*).

34. Prohibition against taking possession of corals, sponges or marine algae. No person shall take, collect, have in his possession or damage any coral, sponges or marine algae from or in the fishery waters except with the written permission of the Chief Fisheries Officer, and in accordance with any such conditions as the Chief Fisheries Officer may specify.

⇒ 35. Prohibition against the sale of or taking possession of conch—(1) No person shall —

- (a) take from the fishery waters, sell, purchase, or at any time have in his possession any immature conch; or
- (b) take from the fishery waters, expose for sale, purchase or at any time have in his possession any conch during the closed season for conch as specified by the Minister by notice published in the *Gazette* and in a newspaper which is printed or circulated in the State.

(2) In this Regulation —

- (a) "conch" includes the whole or any part of any conch;
- (b) "immature conch" means a conch with —
 - (i) a total weight of less than one kilogramme;
 - (ii) meat weight of less than 280 grammes after removal of the digestive gland;
 - (iii) a shell which is smaller than eighteen centimetres in length; or
 - (iv) a shell which does not have a flared lip.

36. Prohibition against the disturbance of sea urchins. No person shall disturb, damage, take from the fishery waters, have in his possession, purchase, — expose for sale, or sell any sea urchins —

- (a) except with the written permission of the Chief Fisheries Officer, and in accordance with any such conditions as the Chief Fisheries Officer may specify; or
- (b) between the 30th day of November to the 1st day of September of the following year, or as otherwise stated by the Minister by notice