CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA



Twenty-second meeting of the Animals Committee Lima (Peru), 7-13 July 2006

Review of Significant Trade in Strombus gigas

1. This document has been prepared by the Secretariat.

Background

- 2. Strombus gigas was included in CITES Appendix II in 1992 (effective as of 11 June 1992). The species is distributed in the wider Caribbean region across at least 28 range States of which only Haiti and the dependent territories of Anguilla (United Kingdom of Great Britain and Northern Ireland) and the Turks and Caicos Islands (United Kingdom) are currently not covered by CITES. In the wider Caribbean, *S. gigas* is by far the most important animal species regulated under CITES, both in terms of the quantity traded and of its socio-economic importance.
- 3. The Animals Committee of CITES is mandated to identify Appendix-II species that are considered as being significantly affected by trade, review and assess all available biological and trade information on these taxa, and formulate recommendations for remedial measures for those species for which trade is believed to be having a detrimental effect. This process is known as the 'Review of Significant Trade'.
- 4. The Animals Committee included *S. gigas* in its Review of Significant Trade for the first time in 1995. Its analysis and consultations with experts and the range States resulted in recommendations that were forwarded in September 1997 to all range States of the species. These called *inter alia* for information on: the biological basis for issuing export permits and the nature of non-detriment findings; the steps taken to establish coordination with the Caribbean Fisheries Management Council to develop and implement a regional management strategy for the sustainable harvesting of *S. gigas;* measures for the collection of data on catch-per-unit efforts; permit issuing procedures; and records of trade by weight or number of shells. It was also recommended that France provide information on the controls of trade in *S. gigas* in Guadeloupe and Martinique, and the Netherlands on controls in Sint Maarten (Netherlands Antilles).
- 5. At its 41st meeting (Geneva, February 1999), the Standing Committee was informed by the Secretariat that all but five range States had provided satisfactory responses. Consequently, the Standing Committee recommended that Parties not accept imports of specimens of *S. gigas* from Antigua and Barbuda, Barbados, Dominica, Saint Lucia, and Trinidad and Tobago. At the 46th meeting of the Standing Committee (Geneva, March 2002), Saint Lucia provided comprehensive information concerning the outstanding recommendations (see document SC46 Doc. 16.2) and the Standing Committee decided to withdraw its recommendation to suspend imports from Saint Lucia of specimens of *S. gigas*. The trade suspensions for Antigua and Barbuda, Barbados, Dominica, and Trinidad and Tobago remained in effect.
- 6. The Animals Committee selected *S. gigas* for a second Review of Significant Trade at its 17th meeting (Hanoi, July August 2001) because of concerns that the levels of authorized exports might

not be sustainable. The review was undertaken in accordance with the provisions of Resolution Conf. 12.8 on the Review of Significant Trade in specimens of Appendix-II species [now Resolution Conf. 12.8 (Rev. CoP13)] which directs the Animals Committee, in cooperation with the Secretariat and experts, and in consultation with range States, "to review the biological, trade and other relevant information on Appendix-II species subject to significant levels of trade", and "to identify problems and solutions concerning the implementation of Article IV, paragraphs 2 (a), 3 and 6 (a)"¹.

- 7. The review involved consultation with the range States of *S. gigas* and the production of a report on the biology and management of and trade in *S. gigas* in the course of 2001-2003 by a consultant, TRAFFIC Europe in cooperation with IUCN, under contract to the CITES Secretariat.
- 8. The draft report was sent to all range States for comments and, where appropriate, additional information. Furthermore, a workshop was organized by the Caribbean Fisheries Management Council, funded by the United States of America, from 11 to 12 June 2003 in Montego Bay, Jamaica. The 'International Queen Conch Initiative CITES' workshop brought together fishery and CITES Management Authorities from the range States, the Caribbean Fisheries Resource Mechanism (CFRM), the Food and Agriculture Organization of the United Nations (FAO), other experts, the CITES Secretariat and TRAFFIC Europe to discuss the draft report, provide additional information, and formulate a number of recommendations related to both the Review of Significant Trade in *S. gigas* and wider capacity-building issues. All this additional information was, to the extent possible, incorporated in a final version of the report (see document AC19 Doc. 8.3).
- 9. At its 19th meeting (AC19; Geneva, August 2003), the Animals Committee analysed the report and categorized the range States of *S. gigas* according to their implementation of the provisions of Article IV, paragraphs 2 (a), 3 and 6 (a). The review concluded that the available information indicated that this species was of 'urgent concern' in three range States (the Dominican Republic, Haiti and Honduras) and of 'possible concern' in a further 13 (Antigua and Barbuda, Barbados, the Bahamas, Belize, Colombia, Cuba, Dominica, Grenada, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago). The 12 remaining range States were eliminated from the process [Bermuda, Brazil, Costa Rica, France (including Guadeloupe and Martinique), Guatemala, Jamaica, Mexico, the Netherlands (including Aruba and the Netherlands Antilles), Panama, United Kingdom (including Anguilla, the British Virgin Islands, the Cayman Islands, Montserrat and the Turks and Caicos Islands), the United States of America (including Puerto Rico and the US Virgin Islands) and Venezuela].
- 10. The trade suspensions resulting from the earlier review in the 90s concerning Antigua and Barbuda, Barbados, Dominica, and Trinidad and Tobago were still in effect by the time of AC19. The Animals Committee therefore concluded that the species in these four countries should be categorized as of 'possible concern' and that they should follow the measures emanating from the second Review of Significant Trade in *S. gigas*.
- 11. In August 2003, comprehensive recommendations, developed by the Animals Committee and endorsed by the Standing Committee, were directed to the 16 range States where exploitation of queen conch for international trade had been categorized as of 'urgent' or 'possible' concern (see Annex 1). The time-frames for implementation varied from four weeks to 24 months, the latter finishing in September 2005. The Standing Committee had agreed in September 2003 with the proposal of the Animals Committee to recommend a suspension of imports of specimens of *S. gigas* from those range States for which the Secretariat, in consultation with the Chairman of the Animals Committee, had not been able to verify that they had implemented the recommendations.

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Article IV, paragraph 2 (a) requires that, as a condition for granting an export permit, a Scientific Authority of the State of export has advised that the export will not be detrimental to the survival of the species concerned; paragraph 3 that a Scientific Authority in each Party monitors exports of Appendix-II species and advises the Management Authority of suitable measures to be taken to limit such exports in order to maintain such species throughout their range at a level consistent with their role in the ecosystem; and paragraph 6 (a) that as a condition for granting a certificate of introduction from the sea, a Scientific Authority of the State of introduction from the sea has advised that the introduction will not be detrimental to the survival of the species concerned.

12. The Animals Committee also identified problems in the course of the review that were not related to the implementation of Article IV, paragraph 2 (a), 3 or 6 (a) (see Annex 1), and requested the Secretariat to address these in accordance with the appropriate provisions of the Convention and relevant Resolutions. These concerned *inter alia* the importation of illegally obtained specimens of *S. gigas* by Aruba (the Netherlands), the Dominican Republic, Guadeloupe (France), Honduras, Martinique (France) and the Netherlands Antilles (the Netherlands); illegal fishing and subsequent export in Haiti, Jamaica, Saint Lucia and Venezuela; insufficient monitoring of trade in the dependent territories of France, the Netherlands and the United Kingdom; and the need to harmonize CITES reporting on trade, collect information on the processing of *S. gigas* meat, and develop standardized terminology and conversion factors.

Implementation of the recommendations

- 13. The Secretariat regularly reported to the Animals and Standing Committees on progress with the Review and implementation of the recommendations by the range States (see for instance documents AC21 Doc. 10.1.1 (Rev. 1) and SC53 Doc. 25), and issued Notifications to the Parties No. 2003/057 of 29 September 2003 and No. 2006/034 of 12 May 2006 on the subject.
- 14. In September 2003, the Secretariat determined, after consultation with the Chairman of the Animals Committee, that for the populations of urgent concern, the Dominican Republic and Honduras had implemented the recommended specific short-term actions within the agreed time-frame of four weeks. These two Parties agreed in particular to suspend the issuance of export permits for all specimens of *S. gigas* from 29 September 2003. They also informed the Secretariat that they were committed to fully implement all the other short-term and long-term actions recommended by the Animals Committee. In support of these efforts, the Secretariat urged all Parties not to authorize any import of specimens of *S. gigas* from the Dominican Republic and Honduras until further notice.
- 15. Also in September 2003, the Secretariat determined, after consultation with the Chairman of the Animals Committee, that Haiti, where *S. gigas* was also categorized as of 'urgent concern', had not implemented the recommended actions within the agreed time-frame. Consequently the Standing Committee recommended to all Parties to suspend the import of all specimens of *S. gigas* from Haiti until this country demonstrated to the satisfaction of the Standing Committee, through the Secretariat, compliance with Article IV, paragraphs 2 (a), 3 and 6 (a) of the Convention.
- 16. As announced at the 51st meeting of the Standing Committee (Bangkok, October 2004), the Secretariat met with representatives of range States of *S. gigas* in the margins of the 13th meeting of the Conference of the Parties (CoP13, Bangkok 2004) to assess progress with the implementation of the Review of Significant Trade in *S. gigas* in the Caribbean region. Many if not all range States had reacted favourably to the recommendations, actively engaged in taking remedial measures where necessary, and were making progress in addressing sometimes complex fishery management and conservation issues. FAO and Caribbean regional fishery agreements were recognized to be very supportive of these initiatives and were providing targeted assistance.
- 17. The Secretariat regularly monitored progress with the implementation of the recommendations throughout the 24-month period, writing to range States to remind them of the recommendations and associated time-frames if no information was forthcoming, and urging them to provide the relevant or missing information. The Secretariat also sought clarifications on trade in *S. gigas* that occurred in 2004 from the Dominican Republic, a range State that had agreed to suspend the issuance of export permits.

Evaluation of implementation of the recommendations

- 18. Resolution Conf. 12.8 (Rev. CoP13) established that the following measures should be taken regarding the implementation of recommendations formulated by the Animals or Plants Committee, in consultation with the Secretariat:
 - q) the Secretariat shall, in consultation with the Chairman of the Animals or Plants Committee, determine whether the recommendations referred to above have been implemented and report to the Standing Committee accordingly;

- r) where the recommendations have been met, the Secretariat shall, following consultation with the Chairman of the Standing Committee, notify the Parties that the species was removed from the process;
- s) when the Secretariat, having consulted with the Chairman of the Animals or Plants Committee, is not satisfied that a range State has implemented the recommendations made by the Animals or Plants Committee in accordance with paragraph n) or o), it should recommend to the Standing Committee appropriate action, which may include, as a last resort, a suspension of trade in the affected species with that State. On the basis of the report of the Secretariat, the Standing Committee shall decide on appropriate action and make recommendations to the State concerned, or to all Parties;
- t) the Secretariat shall notify the Parties of any recommendations or actions taken by the Standing Committee;
- u) a recommendation to suspend trade in the affected species with the State concerned should be withdrawn only when that State demonstrates to the satisfaction of the Standing Committee, through the Secretariat, compliance with Article IV, paragraph 2 (a), 3 or 6 (a); and
- v) the Standing Committee, in consultation with the Secretariat and the Chairman of the Animals or Plants Committee, shall review recommendations to suspend trade that have been in place for longer than two years and, if appropriate, take measures to address the situation.
- 19. In accordance with paragraph q) above, the Secretariat and the Chairman of the Animals Committee reviewed in the course of September and October 2005 the information submitted by the range States and made an initial assessment of their compliance with the recommendations.
- 20. Because of the significance of the queen conch fishery in the Caribbean region, the Secretariat considered it important to consult widely before finalizing its evaluations. The materials and documentation submitted by the range States was shared with FAO fishery experts, who provided detailed country-specific comments, assessed their relevance to the recommended measures, and made a number of general observations. FAO's comments, together with outstanding questions regarding the submissions, were forwarded to the 16 range States in the course of November 2005.
- 21. Subsequently, and with generous support from the National Oceanic and Atmospheric Administration (NOAA, United States of America) and the CITES Management Authority of the Dominican Republic, the Secretariat convened a technical workshop on the implementation by the 16 range States of recommendations formulated in the context of the Review of Significant Trade in *S. gigas*. The workshop was held in Santo Domingo from 13 to 15 December 2005. It was attended by representatives of 15 of the 16 range States (Grenada did not respond to the Secretariat's invitation), a limited number of international and regional fishery bodies (Caribbean Community CARICOM Secretariat, Caribbean Fishery Management Council International Queen Conch Initiative, CFRM, FAO/Secretariat of the Western Central Atlantic Fishery Commission WECAFC) and the Chairman of the Animals Committee. The agenda and objectives of the workshop are presented in Annex 2.
- 22. The workshop was successful and very productive. Range States took the opportunity to clarify the measures they had undertaken in the context of the Review, responded to queries emanating from FAO's and the Secretariat's initial reviews, provided updated information and explained their current and future queen conch fishery policies. It generated a significant amount of additional information, including supplementary materials from several range States that were supplied to the Secretariat in the course of January and February 2006. The 'lessons learned' concerning the reporting of measures by range States as well as issues emerging from the process or remaining of concern, are summarized in Annex 3.
- 23. The Secretariat, in consultation with the Chairman of the Animals Committee, finalized its determination of whether the recommendations were implemented in February 2006. It was concluded that 14 of the 16 affected range States had taken adequate actions to implement the

recommendations of the Animals Committee and ensure compliance with Article IV, paragraphs 2 (a), 3 and 6 (a) for further or renewed trade in this species.

Outcome of the evaluations - 'Species of urgent concern'

24. Dominican Republic

- The Dominican Republic implemented all short-term activities. The implementation of several of the long-term actions was still ongoing, including a comprehensive project on the 'Improvement of the management of the queen conch, *Strombus gigas*, in the Dominican Republic' implemented under the auspices of NOAA and of the Caribbean Regional Fisheries Mechanism (CRFM) in 2005 and 2006.
- The Dominican Republic committed itself to continue to suspend the issuance of capture and export permits for *S. gigas* until all ongoing research activities were completed and an updated management plan for the species had been adopted. This was expected to be completed in 2006. It also made the commitment that based on the results of these studies, it would establish prudent capture and export quotas in consultation with the CITES Secretariat.
- An issue of concern related to exports of queen conch meat in 2004. Between February and August 2004, the Dominican Republic issued several export permits for *S. gigas* meat that had been held in stock, registered and controlled by national authorities (the Sub-Secretariat of Coastal Resources and Marine Affairs) prior to the export moratorium that had been decided in September 2003 and established as one of the short-term actions. The permits were destined for Canada and the Netherlands Antilles (Curação) but, apparently, some were subsequently canceled or not used. However, it is documented that at least one of the permits for 23,864 kg of frozen meat was used and that the meat was exported to Canada. It remains unclear whether another one for the export of 19,813 kg to the Netherlands Antilles was actually used and whether the transaction took place.
- These export permits were apparently issued by the previous Government of the Dominican Republic in compliance with relevant Dominican Republic legislation but contrary to the Animals Committee's recommendation 1. a) which called the Dominican Republic to establish a moratorium on international trade in *S. gigas* without providing an exemption for pre-ban specimens. Canada and possibly the Netherlands Antilles seemed to have ignored the Secretariat's advice not to authorize any import of specimens of *S. gigas* from the Dominican Republic until further notice (see paragraph 13 above). It should be noted that the Management Authority of the Dominican Republic informed the Chairman of the Standing Committee in February 2004 about the existence of these registered pre-ban stockpiles and its wish to export them, but that the matter had not been discussed further by the Standing Committee.
- The new CITES authorities, designated in August 2004, stopped issuing permits for commercial take and export of *S. gigas*, and no exports have been authorized since.
- The Secretariat and the Chairman of the Animals Committee agreed that the export authorized by the Dominican Republic and the subsequent import by Canada of pre-ban queen conch meat should not have taken place. However, the incident remained isolated in time, involved a relatively limited quantity and had little impact on the overall implementation of the actions recommended by the Animals Committee by the new CITES Authorities in the Dominican Republic.

25. Haiti

- The Standing Committee recommended to all Parties to suspend the import of all specimens of *S. gigas* from Haiti in September 2003 (see paragraph 15 above).
- At the workshop in Santo Domingo, Haiti, a country not Party to CITES, explained that it had not taken any of the short-term or long-term actions, but intended to rectify the situation as soon as possible. The competent Haitian authority informed the Secretariat in January 2006 that, following the workshop, it had organized a number of meetings with local stakeholders, and

developed and submitted a project proposal for funding to CFRM on 'Developing Improved Assessment and Management of Queen CVonch in Haiti' which would largely address the Animals Committee's recommendations. In the Secretariat's opinion, the project would be an important step towards ensuring a sustainable exploitation of the species. The project was scheduled to be undertaken in the course of 2006.

- The competent authority furthermore submitted to the Secretariat a new export permit format that better reflected the requirements of the Convention, and indicated that Haiti intended to join the Convention after the elections and the installation of a new government in the first half of 2006.
- At the same time, the competent authority of Haiti requested a temporary respite of the current recommendation to suspend trade to allow for the exportation of a registered stock of shells that were collected prior to September 2003. This would allow the stakeholders to participate fully in the project mentioned above. It should be noted that the queen conch fishery mainly targets meat, and that the shells, which are commonly discarded by queen conch fishers, are primarily a by-product of the meat trade.
- The Standing Committee's recommendation to suspend trade in *S. gigas* from Haiti has been in place for more than two years. According to paragraph v) of Resolution Conf. 12.8 (Rev. CoP13), the Standing Committee, in consultation with the Secretariat and the Chairman of the Animals Committee, should review this recommendation and, if appropriate, take measures to address the situation.

26. Honduras

- Honduras complied with all short-term and long-term actions, and formally committed itself to take the following additional measures concerning its future management of and trade in *S. gigas*:
 - maintain a moratorium on the queen conch fishery until scientifically justified annual harvest and export quotas for queen conch can be established, based on research and analyses of the status of the exploitation and abundance of the resource in Honduras;
 - b) initiate further research and analysis to establish scientifically justified annual harvest and export quotas after the conclusion of the Review of Significant Trade with four vessels provided by the fishing industry;
 - c) implement a research programme to assess queen conch abundance in all main fishing grounds already defined for the future fishery and that were identified by names, latitude and longitude in the Honduras report submitted to the CITES Secretariat;
 - d) use satellite tracking system on the research vessels so that the Government of Honduras, the industry, and the scientists responsible for the research can ensure that the vessels survey the designated grounds following a research survey plan developed for that purpose;
 - e) put Dr Nelson Ehrhardt, a fishery scientist from the University of Miami, in charge of, and responsible for, all the scientific work required for estimating the annual quotas., and incorporate other technical personnel from the DIGEPESCA/SAG into a conch research team;
 - f) ensure that the scientific catch obtained in the monitoring and stock assessment cruises does not exceed 20 % of the 2003 clean-meat reported landings (i.e. does not exceed 210 tones), which is considered precautionary taking into consideration the levels of production during the 10 years preceding the moratorium on the fishery that was established in September 2003;
 - g) issue CITES export permits for the scientific catch to cover the considerable costs required to implement a queen conch stock assessment plan over a wide area of the Honduras continental shelf:

- h) issue CITES export permits for 300,000 pounds of conch meat that had been kept in cold storage since 2004 and that had been collected between December 2003 and May 2004 during the queen conch exploratory fishery that provided all the data used in the analyses to comply with the recommendations to Honduras;
- i) immediately adopt a Ministerial Decree that supports the conch research plan and all the actions necessary to keep the fishery under moratorium until the time when annual quotas can be estimated with demonstrated scientific validity, including a clause indicating that all queen conch regulations resulting from the scientific work would be integrated in the new Fishery Law that is being developed by the Government of Honduras; and
- j) provide periodic reports to the CITES Secretariat on progress with the queen conch research plan.

Outcome of the evaluations - 'Species of possible concern'

- 27. Antigua and Barbuda, the Bahamas, Barbados, Belize, Colombia, Cuba, Dominica, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago
 - These 12 range States have complied with the mid-term and long-term recommendations. Some of the activities that they and the Dominican Republic and Honduras undertook are summarized in Annex 4.

28. Grenada

- Grenada did not provide information on its implementation of the recommendations, and did not respond to the Secretariat's reminders or invitation to attend the Santo Domingo workshop. The Secretariat, in consultation with the Chairman of the Animals Committee, was therefore unable to determine whether Grenada complied with the recommendations. In accordance with the decisions of the Standing Committee taken at the beginning of the implementation period in September 2003, the Secretariat notified the Parties in May 2006 that the Standing Committee recommended a suspension of imports of specimens of *S. gigas* from Grenada.
- 29. The Chairman of the Standing Committee was consulted by the Secretariat about the determinations outlined in paragraphs 23 to 27 above. He agreed with the Secretariat's proposal to notify the Parties that Antigua and Barbuda, Barbados, Bahamas, Belize, Colombia, Cuba, Dominica, the Dominican Republic, Honduras, Nicaragua, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago had been removed from the Review of Significant Trade in *S. gigas*. The Secretariat communicated this in Notification to the Parties No. 2006/034 of 12 may 2006.
- 30. Most range States agreed to make the materials and information that had been produced for the purpose of the Review of Significant Trade in *S. gigas* more widely available, e.g. on the CITES website, and to FAO and regional Caribbean fishery bodies. This also concerns for instance the Power Point presentations made by the 15 participating range States, FAO/WECAFC, CFRM, IQCI and the CITES Secretariat that had been presented in the workshop in Santa Domingo in December 2005. The Secretariat has translated a number of interesting documents and reports to ensure their availability in both English and Spanish and enhance their regional utility. Much of the information that was collected during the Review is to be made available on the Secretariat website, with linkages to other websites such as that of the International Queen Conch Initiative.
- 31. FAO and regional Caribbean fishery organizations provided excellent support throughout the Review and collaborated with CITES. FAO published in 2006 a 'Manual for the monitoring and management of queen conch', encompassing all aspects of the implementation of Article IV of the Convention and the making of non-detriment findings. The manual also incorporates know-how and data that had been acquired by range States during the Review. FAO furthermore planned several training workshops in the Caribbean Region to help range States make better use of the Manual, thereby improving the implementation of CITES for trade in *S. gigas*.

Review of significant trade in specimens of Appendix-II species (Resolution Conf 12.8)

RECOMMENDATIONS CONCERNING *STROMBUS GIGAS* (PHASE V) [made at the 19th meeting of the Animals Committee Geneva (Switzerland), 18-21 August 2003]

Pursuant to the implementation of the provisions of Resolution Conf. 12.8, the Animals Committee proposes that the Standing Committee recommend a suspension of imports of specimens of the species from those Parties in Category (i) and Category (ii) if the Secretariat, in consultation with the Chairman of the Animals Committee, has not been able to verify that they have implemented the following:

Category (i) - 'species of urgent concern' for which the available information indicates that the provisions of Article IV, paragraph 2(a), 3 or 6, are not being implemented

Dominican Republic; Haiti; Honduras

- 1. Short-term actions to be taken within 6 months:
 - a) Establish a moratorium on the commercial harvest (excluding legal harvest in territorial waters of the Parties concerned) and the international trade of *Strombus gigas* within four weeks of these recommendations being communicated by the Secretariat to the Parties;
 - b) Identify areas to be designated for commercial fisheries;
 - c) Undertake density studies of *Strombus gigas* in these designated areas;
 - d) Identify and analyse trends in available landing data;
 - e) Establish a standardized minimum weight of unprocessed and processed meat that corresponds to adult specimens;
 - f) Based on the results of the density studies, the analysis of landing trends and standardized meat weight establish cautious catch and export quotas in consultation with the Secretariat;
 - g) Demonstrate that actions 2a), 2b) and 2 c) below have been initiated.
- 2. Long-term actions for implementation to be taken within 18 months:
 - a) Design and implement a fishery data collection programme to collect catch and effort data, including 1) a system of permits and licences for commercial harvesters and exporters, and 2) regular reporting of landing and export data;
 - b) Design and implement a long-term population monitoring programme for the designated commercial fishing areas that, as a minimum, should provide reliable estimates of adult and juveniles densities within commercial fishing areas;
 - c) Give consideration to and implement the recommendations of the International Queen Conch Initiative CITES workshop (Montego Bay, Jamaica 11-12 June, 2003) annexed hereto, particularly the recommendations concerning:
 - i) Development of a regional management regime, including cooperative quota setting;
 - ii) Law enforcement capacity and effectiveness;
 - iii) Population assessments and other research relating to the management of Strombus gigas.

Category (ii) - 'species of possible concern' for which it is not clear whether or not the provisions of Article IV, paragraph 2(a), 3 or 6(a) are being implemented

Antigua and Barbuda*; Barbados*; Bahamas; Belize; Colombia; Cuba; Dominica*; Grenada; Nicaragua; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Trinidad and Tobago*

(* refers to those countries currently subject to a trade suspension under Phase III of the Review of Significant Trade)

3. Short-term actions to be taken within 12 months:

Bahamas, Belize, Colombia, Cuba, Nicaragua, Saint Kitts and Nevis and Saint Vincent and the Grenadines shall:

- a) Establish within 12 months cautious catch and export quotas, communicate these to the Secretariat and provide information on the basis of these quotas;
- b) Establish a standardized minimum weight of unprocessed and processed meat that corresponds to adult specimens;
- c) Demonstrate that actions 3 d), 3 e) and 4 below have been initiated;
- d) Design and implement a fishery data collection programme to collect catch and effort data, including 1) a system of permits and licences for commercial harvesters and exporters, and 2) regular reporting of landing and export data;
- e) Design and implement a long-term population monitoring programme for the designated commercial fishing areas that, as a minimum, should provide reliable estimates of adult and juveniles densities within commercial fishing areas.

4. Long-term actions to be taken within 24 months:

All Parties included in Category (ii) shall:

- a) Apply adaptive management procedures to ensure that further decisions about harvesting and management of the species will be based on the monitoring of the impact of previous harvesting and other factors;
- b) Give consideration to and implement the recommendations of the International Queen Conch Initiative CITES workshop (Montego Bay, Jamaica 11-12 June, 2003) annexed hereto, particularly the recommendations concerning:
 - i) Development of a regional management regime, including cooperative quota setting;
 - ii) Law enforcement capacity and effectiveness;
 - iii) Population assessments and other research relating to the management of Strombus gigas.

At its 41st meeting the Standing Committee recommended to all Parties that they suspend imports of specimens of *Strombus gigas* from certain range States. The Secretariat should remind these States of the measures that need to be implemented before the recommendation of the Standing Committee can be withdrawn.

Category (iii) - 'species of least concern' for which the available information appears to indicate that the provisions of Article IV, paragraph 2(a), 3 or 6(a) are being met

Bermuda; Brazil; Costa Rica; France (including Guadeloupe and Martinique); Guatemala; Jamaica; Mexico; the Netherlands (including Aruba and the Netherlands Antilles); Panama; United Kingdom of Great Britain and Northern Ireland (including Anguilla, British Virgin Islands, Cayman Islands, Montserrat and Turks and Caicos Islands); United States of America (including Puerto Rico and the US Virgin Islands); Venezuela

On the basis of paragraph I) of Resolution Conf. 12.8, all range States categorized as of 'least concern' would be eliminated from the review.

These range States are invited to participate in the regional activities arising from this review of significant trade in *Strombus gigas*, and to give consideration to and implement the recommendations of the International Queen Conch Initiative - CITES workshop (Montego Bay, Jamaica 11-12 June, 2003) annexed hereto, particularly the recommendations concerning:

- Development of a regional management regime, including cooperative quota setting;
- Law enforcement capacity and effectiveness;
- Population assessments and other research relating to the management of Strombus gigas.

<u>Problems identified in the course of the review that are not related to the implementation of Article IV, paragraph 2 (a), 3 or 6 (a)</u>

In compliance with paragraph I) of Resolution Conf. 12.8 the Animals Committee recognized that there were issues of concern in range States other than those specifically related to the implementation of

Article IV, paragraph 2 (a), 3 or 6 (a), and requested the Secretariat to address these in accordance with the appropriate provisions of the Convention and relevant Resolutions.

Issues of concern in particular range States:

- Specimens of Strombus gigas are reportedly imported into several countries and territories after being obtained illegally, for example through unauthorized fishing in waters under the jurisdiction of other states and the subsequent transfer of the product across international borders. Often, the product is sold at sea or reported as being landed in national waters. Although this happens in many range States this is of particular concern for Aruba (NL), Dominican Republic, Guadeloupe (FR), Honduras, Martinique (FR) and the Netherlands Antilles (NL).
- 2. In several countries illegal fishing and subsequent transfer of the product across international borders occurs undermining national management measures. This is of particular concern for Haiti, Jamaica, Saint Lucia and Venezuela. These countries should also explore opportunities to strengthen bilateral communication, cooperation and exchange of data on law enforcement issues. This cooperation should especially be sought between importing and exporting States.
- 3. Insufficient monitoring and reporting of trade occurs in a number of range States and needs to be addressed. Monitoring and reporting of trade volumes seems especially problematic for the dependent territories of France, the Netherlands and the United Kingdom, with trade often not monitored and going unrecorded.

Issues of concern in all range States:

- 4. The majority of Parties have reported trade in *Strombus gigas* meat in numbers of specimens instead of kilograms, which prevents proper monitoring and analysis. All meat in international trade should be reported in kilograms (kg) and live specimens and shells in kilograms (kg) or number of specimens.
- 5. To properly control and monitor levels of exportation, range States are encouraged to collect and communicate information on percentages of tissue loss (and thus weight) during the processing of *Strombus gigas* meat.
- 6. All countries are requested to collaborate in the development and establishment of standardized terminology and conversion factors for processed meat of *Strombus gigas* that allow estimation of the number of animals in international trade.
- 7. Range States of *Strombus gigas*, and particularly those categorized as of urgent concern, should seek assistance from the United Nations Food and Agriculture Organization (FAO) and urge major importing countries to contribute technical and financial assistance.

Annex

Recommendations of the International Queen Conch Initiative - CITES Workshop Montego Bay, Jamaica 11-12 June, 2003

Recognizing that *Strombus gigas* is one of the most important fisheries for the region and that this species is experiencing continued and significant declines;

Recognizing also that due to its biological characteristics, this species is vulnerable to over-exploitation and that once depleted, recovery can take many years to occur;

Recognizing further the 1996 San Juan Declaration establishing the International Queen Conch Initiative;

Considering that an active program to cooperate on the conservation and management of this species will directly respond to guidance from leaders given at the World Summit on Sustainable Development with respect to the need to take action at all levels to restore depleted fish stocks on an urgent basis;

Reaffirming our commitment to proper implementation of Article IV of CITES;

Recognizing that a lack of financial and human resources limits the ability of national governments and regional organizations to implement the recommendations in this document;

Noting that stock declines have occurred despite 10 years of listing on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);

Deeply concerned that a lack of focused attention to this species will result in the loss of this species as a commercially viable resource in many parts of the region;

Acknowledging the management and regulatory measures including closures, gear and size restrictions already underway at the national level in support of the sustainable use of this species,

Fully aware of the need to consider management of this species in the context of scarce resources for fisheries enforcement and as one component of a sustainable fisheries management program at the national, sub-regional and regional level;

Noting that reliability, compatibility and quality of data on the status and trends of queen conch stocks and on trade constitutes a serious impediment to effective management of conch stocks;

Understanding the need for greater networking among countries and regional partners to manage this shared resource;

Committed to building partnerships among all interested organizations, institutions and stakeholders in the region to maximize effective use of scarce human and financial resources; and

Welcoming the recent establishment of the Caribbean Regional Fisheries Mechanism in this regard;

The International Queen Conch Initiative - CITES Workshop submits the following recommendations, pending approval by governments, for consideration by national governments and appropriate intergovernmental bodies, in particular CARICOM, CRFM, CITES and FAO:

Relating to significant trade review process and improvement of CITES implementation capacities

- 1. States should provide specific comments on the report in its totality and national implementation of Article IV to CITES Secretariat by June 30 2003 deadline.
- 2. After consideration in Capitals, meeting organizers should provide to CITES, by the June 30 2003 deadline, these recommendations along with a summary report as a regional response to the TRAFFIC Report.
- 3. States should urge appropriate authorities to review relevant national legislation implementing CITES with a view to meeting minimum standards in the CITES National Legislation Project.
- 4. States that have not already done so should consider establishing catch and export quotas to improve the management of *Strombus gigas* and should report those quotas to CITES authorities for notification to Parties.
- 5. States, where appropriate, are urged to find the most effective channel of communication between authorities responsible for queen conch management and national CITES authorities and stakeholders, and between the CITES Secretariat and the Parties.

- 6. CITES and FAO are urged to work together to finalize the Memorandum of Understanding between them as soon as possible.
- 7. One goal of the CITES-FAO MOU is to facilitate improved communication and exchange of information between CITES and fisheries authorities at the national level bearing in mind the existing FAO communication network.
- 8. States should consider designating authorities responsible for management of conch stocks as CITES authorities for this species.

Relating to improvement of scientific research on queen conch biology

- 9. Establish regional database and/or standardized data storage formats for conch biological research.
- 10. Promote partnership with existing organizations working on similar activities.
- 11. Stock assessment, early life history, growth and recruitment studies need to be priorities in national and regional research programs.
- 12. Promote the undertaking of more abundance surveys for *Strombus gigas*.
- 13. Need to develop standardized methodologies and implementation strategies for more robust abundance surveys taking into account the biological characteristics of *Strombus gigas*.
- 14. Explore stock enhancement opportunities for this species as well as opportunities for transplantation of spawning stocks to locations that will maximize spawning success.
- 15. Biological research should also focus on identification of essential spawning and recruitment habitat as well as research addressing dispersal of larvae for *Strombus gigas* with a view to assisting planners in establishing effective marine reserves to promote rebuilding of stocks.
- 16. Cooperative arrangements should be sought to conduct stock assessments, based on the best science available and transparency of data, for queen conch, as necessary.

Relating to improvement of status and tends reporting for queen conch stocks

- 17. Promote exchange of standardized data to facilitate a more accurate regional picture of status and trends of *Strombus gigas* stocks. In this regard, a harmonized conversion factor for conch product types is critical.
- 18. Favourably consider CRFM Project proposal for Strengthening Assessment and Management of the Conch Resources in the Region.
- 19. As a matter of priority, States should consult within governments to reduce discrepancies in reporting on status and trends of stocks as well as trade data (e.g. differences in CITES data and fisheries export data).
- 20. The region should actively participate in the implementation of FAO's Strategy for Improvement of Status and Trends of Fisheries requesting that Queen Conch be considered as a priority by FAO in implementing the Strategy.

Relating to improved cooperation on management of queen conch stocks

- 21. States should favourably consider CRFM proposal to establish a Caribbean regional lobster and conch fisheries management organization. CRFM should consult with other regional bodies in order to avoid duplication of efforts.
- 22. Non-CARICOM countries are encouraged to become Associate Members of CRFM at the earliest opportunity. Non-CARICOM countries should work closely with CRFM to establish criteria for associate member status in CRFM.
- 23. During discussions/negotiations to establish a Caribbean regional lobster and conch fisheries management organization, consideration should be given to the use of the CRFM Lobster and Conch Working Group as a mechanism to organize efforts in this regard.
- 24. Pursue discussions and cooperative opportunities on the utility and feasibility of establishing marine reserves for queen conch stocks, and in particular pursue cooperation between CRFM initiative, Caribbean Environment Program, FAO, and other governmental and non-governmental organizations on these issues.

25. Cooperation on management measures at the sub-regional level will be critical to leveraging scarce resources.

Relating to improved law enforcement capacity and effectiveness

- 26. States should pursue, as a matter of priority, regional cooperation to deter and eliminate IUU fishing activities in the Caribbean region.
- 27. Recognize the need for and initiate capacity building programs to implement these recommendations, in particular with respect to law enforcement issues.
- 28. Cooperative programs should include but not be limited to information sharing, law enforcement initiatives, training opportunities, technical assistance, and other relevant means.
- 29. States, where appropriate, should strengthen their legal and regulatory structures for law enforcement relating to fisheries management.
- 30. Promote opportunities for regional cooperation on implementation of the FAO International Plan of Action to deter, prevent and eliminate IUU fishing, in particular Caribbean regional participation in upcoming FAO consultations on IPOA implementation.
- 31. Consider participation in the voluntary Fisheries Monitoring Control and Surveillance Network.
- 32. Explore opportunities to strengthen bilateral communication, cooperation and exchange of data on law enforcement issues. This cooperation should especially be sought between importing and exporting States.

Relating to improved education, outreach and involvement of industry and interested stakeholders

- 33. Develop and implement education and outreach programs targeting fishers, consumers and young people designed to raise awareness of queen conch status and concerns.
- 34. Seek partnership opportunities with industry and NGO community to fund these efforts. (note: Dominican Republic, Archipelago of the Sciences Program (Guadeloupe), CONACYT (Mexico), CINVESTAV (Mexico), Parque Xelha (Mexico), Conch Heritage Network (USA) and CFMC programs for youth outreach).
- 35. Ensure transparency throughout the development of a regional fisheries management organization for conch and lobster fisheries by including industry and interested stakeholders in these discussions at local, national, sub-regional and regional levels.

Relating to operationalizing resolutions and international conventions and other relevant arrangements

- 36. Promote cooperation between intergovernmental organizations interested in this resource, in particular CITES and SPAW protocol, as a means to secure adequate resources for States to implement these recommendations and meet commitments under international conventions.
- 37. States should solicit donor parties and organizations that are interested in the conservation and sustainable use of the queen conch outside the range States region to provide the technical assistance and financial support in accordance with Conf. Res. 12.8 to ensure that adequate human resources, institutional capacity, legal and regulatory systems, research and management strategies are executed and maintained for the overall improvement of this marine resource.
- 38. States should promote the continued viability of *Strombus gigas* for the food security of the region by fully implementing appropriate quality assurance programs, recognizing the need for capacity building assistance in this regard and noting the value-added such work would bring to the sector.

Workshop on the implementation by 16 range States of recommendations formulated in the context of the CITES Review of Significant Trade in *Strombus gigas*

Dominican Republic, 13-15 December 2005

Background

Strombus gigas, queen conch, is included in Appendix II of CITES. International trade in specimens of this species may be authorized if the relevant national CITES authorities are satisfied that certain conditions are met; above all that trade will not be detrimental to the survival of the species in the wild.

Because of concerns that the levels of authorized exports might not be sustainable, the CITES Animals Committee reviewed trade in *S. gigas* in 1995 and again in 2001-2003. In August 2003, a comprehensive set of recommendations was directed to 16 range States where exploitation of queen conch for international trade appeared problematic. These recommendations, developed by the Animals Committee, had been agreed to by the Standing Committee. The timeframes for their implementation ranged from 4 weeks to 24 months, the latter finishing in September 2005. With the exception of Haiti, it would appear that many of these range States acted favorably upon these recommendations, actively engaged in taking remedial measures where necessary, and made progress in addressing sometimes complex fishery management and conservation issues. The United Nations Food and Agriculture Organization (FAO) and Caribbean regional fishery agreements have been informed about and were generally supportive of this process.

The Secretariat, in consultation with the Chairman of the Animals Committee, needs to establish if the recommended actions were adequately implemented by the 16 range States. This takes place after the main deadline in September 2005 expired.

Because the artisanal queen conch fishery and the trade in the valuable meat of this large marine snail are of particular importance to the Caribbean region, the Secretariat planned to consult widely before finalizing its evaluations. In practice, it will provisionally determine how the 16 countries complied with the set of recommendations directed to them in consultation with the Chairman of the Animals Committee (and possibly fisheries experts), and before finalizing these assessments consult the affected range States at a regional workshop in the Caribbean. This would also enhance the transparently of the CITES process and the understanding in the region of the proposed measures.

The results of the meeting will be taken into consideration by the Secretariat to finalize its evaluation of the implementation by the 16 range States of the CITES recommendations. In case a range State effectively took the recommended measures, the Secretariat will, following consultation with the Chairman of the Standing Committee, notify the country accordingly. The country could then consider continuing or resuming trade in *S gigas* in compliance with the CITES provisions and the recommendations of the Animals Committee. However, the Standing Committee recommended already in August 2003 that imports of specimens of *S. gigas* be suspended from those range States that would fail to take the recommended measures. The determinations should be finalized by the end of 2005.

The overall outcome of the evaluation and the rational for the Secretariat's recommendations regarding the 16 range States will be presented in a document to the Standing Committee at its 54rd meeting in 2006. The Secretariat will also inform the Animals Committee about the outcome of the Review of Significant Trade in *S. gigas* at its next meeting in 2006. The lessons learned will be taken into consideration in the Reviews of further marine species.

If range States agree, the relevant materials that the Secretariat compiled during the process will be shared with other interested range States and with regional fisheries agencies such as those of CARICOM and FAO. They may provide input into other regional initiatives concerning *S. gigas*, form the basis of targeted assistance or research, and generally contribute to the species management.

Objectives

The workshop's main objectives are as follows:

- a) To present summaries of the information that the 16 range States provided to the Secretariat about their implementation of the CITES recommendations;
- b) To inform the range States about the provisional evaluation by the Secretariat of compliance with the recommendations:
- c) To offer a final opportunity to range States to add information, clarify actions they have undertaken, submit further data, update submitted information, etc.
- d) To allow range States to comment on the provision evaluations;
- e) To peer review and exchange data and materials submitted by the different range States and share relevant scientific and management experiences;
- f) To build regional consensus for and better understanding of the CITES decision-making process concerning trade in *S. gigas*;
- g) To discuss with the range States the most positive or useful actions that were recommended by the Animals Committee as well as the most problematic ones; and
- h) To agree on next steps to ensure that the *S. gigas* fishery remains sustainable and viable in the Caribbean region; and
- i) To allow the Secretariat, in consultation with the Chairman of the Animals, to refine and strengthen its provisional evaluations.

Provisional Agenda

- 1. Introduction
 - a. Welcoming address
 - b. Workshop goals and structure
- 2. The Review of Significant Trade in Strombus gigas
 - a. The review process 2003-05
 - b. Measures reported by the range States in compliance with recommendations
 - c. Provisional determination of compliance
 - d. Issues to be resolved at this workshop
- 3. Regional efforts to improve queen conch fisheries management alongside the CITES process
- 4. Comments and updates from range States on their implementation of the CITES recommendations
 - a. Actions undertake to date: updates of submitted information; further or new data; clarifications of measures taken; recent developments in queen conch management and fisheries
 - b. Comments on the provisional evaluations
 - c. Future planning; lessons learned and challenges ahead
- 5. Round table discussions
 - a. Contribution of the CITES Review of Significant Trade process to regional management and conservation of *S. gigas*
 - b. Problems that remain to be resolved
 - c. Cooperation with regional and international initiatives to improve queen conch fisheries management
 - d. Regional and international collaboration and communication
 - e. Future use of materials and information collated during the process
 - f. The way forward
- 6. Agreement on actions and timetables to complete the Review of Significant Trade process and initiate further fisheries management activities
- 7. Conclusion

Workshop on the implementation by 16 range States of recommendations formulated in the context of the CITES Review of Significant Trade in *Strombus gigas*

Dominican Republic, 13-15 December 2005

Reporting from 16 range States on measures to implement recommendations

1. Lessons learned:

- Encourage dedicated reporting that systematically and directly addresses each recommendation
- Countries should be required to provide information fully, clearly and unambiguously, and to use references
- Countries may benefit from or should be encouraged to ask for training or assistance in preparing technical reports of the required standard
- Put recommendations in an easily understood framework, e.g. (i) monitoring and assessment of the resource and the fishery; (ii) management measures implemented to ensure sustainable use and non detrimental trade; (iii) enforcement of those measures; (iv) controls of international trade in support of responsible management
- The purpose of some recommendations was unclear and range Sates were confused on what exactly they were required to do; consider involving fisheries experts [FAO?] when drafting recommendations
- A well-designed questionnaire could facilitate reporting by range States

Issues emerging from the Review of Significant Trade in S. gigas

- 2. Some countries do not seem to be aware of what is required to manage a fishery for sustainability (e.g. reported actions taken in isolation, not taking account the need to balance fishing mortality with resource productivity, or without clear rationale in relation to sustainable use):
 - Targeted capacity building in assessment and fisheries management of queen conch remains necessary. Priorities need to be identified and the existing efforts enhanced and supported [FAO manual; San Andres workshop;...]
 - Range States would benefit from assistance to improve their making of 'non-detriment findings' for CITES trade to take place
 - Management advice and training have to take account of the differences between countries with small-scale artisanal, medium-sized or industrial queen conch fishery
- 3. Management measures for sustainable use that range States deploy:
 - Closed seasons, protecting vulnerable life stages or habitats, or reducing fishing days: only
 effective if sufficiently long and if fishing effort is reduced below Maximum Sustainable Yield
 - Limited access (e.g. fishing gear restrictions; limitations in depths; harvest quotas or bag limits):
 prevents over-exploitation only if maximum potential effort is reduced well below MSY
 - Licensing or permit system to monitor and control fishers: needs to be coupled with a limited access system and effectively reduce fishing effort below MSY
 - Minimum size or age limits to avoid recruitment overfishing: size limit must be set high enough to ensure that adult population and fecundity remain sufficiently high to maintain adequate recruitment
 - Closed areas: needs to protect sufficiently high proportion of the adult population to ensure that recruitment is maintained
- 4. Need for continued specific technical and scientific input regarding:
 - Growth rate, age-at-maturity and fecundity by size to establish simple recruitment models and minimum sizes to be respected for particular populations
 - Closed seasons: When and for how long? Coordination amongst countries that share stocks?
 - Fishing gear and methods: What is sufficiently restrictive and can be effectively controlled?

- National and regional priorities for no-take zones and Marine Protected Areas (MPAs)
- Controllable, efficient licensing or permit systems
- Socio-economic incentives for compliance
- Measures re. controls of exports that could complement and strengthen fisheries management
- 5. Continued need to develop standardized terms, volumes and values for *S. gigas* in trade and for harvest and export quotas
- 6. High costs for effectively managing a conch fishery (surveys, quota setting, monitoring, licensing, capacity building, enforcement,...)
 - Explore cost-effective solutions where fishery is small, e.g. territorial use rights in fisheries (TURFS), transferring costs and benefits of management to local communities; MPAs where supported by stakeholders
 - Envisage external support for key-steps in management of larger fisheries and for multi-national or regional approaches (GEF; CRFM proposal;...)
 - Options to involve private sector while ensuring economic viability, objective scientific input and unbiased management (taxation, licensing, marketing of quotas, conch 'funds',..)
- 6. Few countries seem to engage in regional or multi-national management efforts, although that this is expressed as being important
 - How to develop and implement truly regional or sub-regional management regimes and promote regional scientific input?
 - Amongst which range States could cooperative quota setting and/or management be envisaged?
- 7. Countries often use different approaches towards population assessments, survey methods and quota setting:
 - Determine and disseminate best practices
 - Enhance scientific capacity of managers
 - Encourage use of FAO manual and implementation of recommendations from San Andres workshop
 - Envisage external reviews and guidance, and regional scientific collaboration
- 8. Little information was provided on law enforcement activities or control efforts and the effectiveness thereof, but many countries indicate that illegal harvest and trade is a problem
 - How to strengthen national and regional law enforcement and controls over queen conch fisheries and trade? (Harmonization of sanctions, equip and train enforcement agencies, build capacity of judiciary, etc.)
 - How to better control industrial queen conch vessels?
 - Observer programmes? Monitoring of vessel movements?
 - What enforcement cooperation can be envisaged between countries sharing stocks?
 - Explore incentives that could promote compliance with regulations
- 9. Within their specific areas of competence, CITES, FAO and various regional agreements and institutions (CFRM and others) share an interest in supporting efforts to ensure sustainable and legal use of queen conch
 - Envisage ways to enhance existing collaboration
 - Should coordination and cooperation amongst these bodies be institutionalised so that it becomes more stable and permanent? If so, what are the options?

Examples of activities undertaken and information provided by range States in response to the recommendations (for numbering and details of recommendations: see Annex 1)	1a) A moratorium implemented from 1/11/03 to 31/1/04. Thereafter permits were issued for the export of ca. 24 tonnes of meat. Moratorium again in place since August 2004. 1b) to f) Implementation of the CRFM project "" Assessment of Conch Resources"; partial results reported and research programme ongoing; training provide; research equipment purchased; inventories in one site started and planned for several more. 2a), b) Achieved through the full implementation of the CFRM project, which included the development of a Management Plan for S. gigas 2c i) Cooperation with CRFM 2c ii) and iii) National legislation adopted to regulate trade in CITES-Listed species; public awareness materials produced	No actions undertaken	1a) A moratorium on industrial catches and on the export of queen conch was established by the Secretaria de Agricultura y Ganadería (SAG) through the Acuerdo Ministerial 820-03 of 29/09/2003	1b) Designated areas for industrial fisheries and protected areas for queen conch populations were established by SAG, and initiated a program of biological monitoring in the designated areas through controlled exploratory fisheries. Information was provided about the location and criteria used to select and design the areas.	1c) Density studies in designated fishery areas were initiated in November 2003, showing densities (mean = 192 ind./ha) above the majority of other Caribbean regions and above the critical density value recommended by CITES (50 ind./ha). Details of innovative survey methodology were provided.	1d) Details of annual exports of queen conch and information on conversing unprocessed, live weight, unprocessed meat weight and processed meat weight were provided.	1e) Estimations of the number of specimens per kilo of processed meat and conversion factors for different degrees of cleaning provided.	1f) Cautious quotas have not been established yet. Undertook preliminary stock assessment, based on estimates of growth rate and an age-converted catch curve.	2a) A system of permits and licenses for industrial and artisanal fisheries and exporter was established. Once the fishery re-opens catch and export data are to be obtained.	2b) An outline of a strategy for the long-term monitoring of queen conch in commercial fishing
Examples of submitted materials and reporting	 Report on queen conch catch and related ongoing research activities, September 2005 Report to Santo Domingo workshop, December 2005 	 Report to Santo Domingo workshop, December 2005 	• Report on the results of research related to Strombus gigas and the associated fishing industry in Honduras, June 2005	 Measures taken by Honduras to implement short-term and long-term recommendations (briefings January 2004, May 2005, June 2005) 	 Report to Santo Domingo workshop, December 2005 Reports addressing FAO and Secretariat questions, January 2006 	New legislation, February 2006				
Range State	Dominican Republic	Haiti •	Honduras	•	•	•				

		February 2006. Honduras submitted a project proposal for assessing the queen conch stock to the Sistema Arrecifal Mesoamericano (SAM) and to FAO (Rome).
		2c) The establishment of a regional organization for the interchange of information obtained from scientific research and management of queen conch has been suggested by Honduras. A request was made for CITES assistance to establish such an organization. New national legislation was adopted re. S. gigas fishery and management. SAG has initiated the elaboration of a proposal for
		national law concerning CITES, and this proposal has been presented to the government for approval. Efforts were undertaken to establish an agreement among SAG, the Navy and the "Dirección de Marine Mercante Nacional" to develop a system of enforcement and control of
		fishing fleet. A mandatory vessel monitoring system using satellite will be applied to the queen conch fleet once the moratorium is lifted. Honduras has carried out a study of population density in designated fishing areas and plans to continue monitoring the status of the population through exploratory fisheries.
'species of possible con' Saint Vincent and the G. S. cidas)	cern': Antigua and Barbuda*; Barbados*; Baha renadines; Trinidad and Tobago*(* refers to co	'species of possible concern': Antigua and Barbuda*; Barbados*; Bahamas; Belize; Colombia; Cuba; Dominica*; Grenada; Nicaragua; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Trinidad and Tobago*(* refers to countries subject to a trade suspension since 1999 following the first Review of Significant Trade in S. cioas)
Antigua and	A proposal to conduct an assessment of	3a) Management efforts included establishment of protected areas, legislative reforms and queen
Barbuda*	conch abundance in Antiguan waters,	conch abundance surveys, closed seasons and size restrictions.
	November 1996	3 b) Undertook morphometric analyses of two stocks of conch and determined minimum meat
	 Morphometric analysis of two queen 	weights indicating the caught animal was an adult.
	conch stocks from the Western shelf of	3d) Sampling of catch and effort took place from 1999 to 2002.
	Antigua, 1999	3e) A scientifically rigorous survey was completed in 1999. Antigua also submitted a proposal for
	Antigua and Barbuda queen conch Appropriate Conchine Conchine Conchine Concording Concordi	an underwater visual survey planned for 2005 under the initiative of CRFM.
	abundance survey (1999), February 2001	4a) Current production was considerably less then MSY estimates and production have been energined at these levels for a decade without showing negative transfer paracting the CDLE death
	 Proposal for the implementation of 	or biological data; the level of production seems sustainable however exploitation above current
	underwater visual surveys to determine the abundance, population structure and	levels should not be encouraged until a comprehensive abundance survey of the shelf is conducted. The outputs from the proposed visual survey will be used to update management
	morphological measurements of queen	recommendations.
	conch (Strombus gigas) in key areas in selected CARICOM/CARIFORUM states.	4b) Antigua is working with CRFM; information obtained in the data collection programme
	2003	suggests low non-compliance with existing minimum size regulations; the 1999 survey, the morphometric analyses and the proposed 2005 survey are all examples of good and relevant
	 Country report on the queen conch for Antigua and Barbuda, March 2004 	research that should be used in management to facilitate sustainable use of the resource.
	 Status of the conch fishery in Antigua- Barbuda, October 2004 	
	 Report to Santo Domingo workshop, December 2005 	

0,000		Deiofina Links 200E E	20) Fotobliched augint
Dallallas	•	Bilellig, July 20033	3d) Established quotas. 2h) Cita limit of "sound developed floring lim" and that such adults are been said.
	•	Progress in the implementation of the Action plan for the conservation of the queen conch in the Bahamas, December	3b) Size innicor l'a well-developed nating lipli ensuring chacconi addits are natvested. 3c) and d) A fishery data collection programme exist and an initiative is ongoing to improve the system.
	•	2005 Report to Santo Domingo workshop,	33d) All exporters and commercial vessels above 20 ft in length require a permit. All export data are reported to the Fisheries Department.
		December 2005	3e) A Management Plan exists and is partially implemented, but some sections and approaches were still under discussion with experts and stakeholders.
			4a) Action plan for the conservation of the queen conch in the Bahamas under implementation. This includes planning of abundance survey (field work component involving SCUBA surveys beginning in February 2006 in the Berry Islands); the establishment of conservative quotas; improvement to the accuracy of landings records; improved surveillance; and the development of no-take zones.
			4b) Bahamas is working with CRFM. Reference is made to the proposed CRFM project "Rehabilitation and management of the queen conch resource in member States of CARICOM". Funding has not vet been obtained for this activity. A comprehensive public education campaign
			exists which, although not limited to queen conch, is being continued through the production of brochures, the holding of town meetings in the Family Islands, direct contacts by field officers with stakeholders and collaboration with a number of NGOs
Barbados*	•	Barbados fisheries management plan	Only a small-scale, non-commercial fishery for conch exists. International trade insignificant.
	•	2001-2003 for conch Report to Santo Domingo workshop,	Initiated a study to inventory and describe queen conch sites, conch abundance and size data. Underwater video to be used as part of an educational programme.
		December 2005	The Fisheries Division studies all dive fisheries of Barbados, including queen conch, in 2006-07 to identify important fishing areas and estimate the value of each fishery; activities included in the
			Biodiversity's work Programme for 2006-2007 and funding ensured. Undertook a public awareness campaign deterring the harvest of iuveniles was undertaken by the
			Fisheries Division and local fisherfolk organizations.
Belize	•	Belize national conch report 2004, September 2004	3a) Conservative annual quotas established. The 2003 conch abundance survey estimated a substantial increase in abundance compared to that in 1996 and densities in the areas sampled in
	•	Fisheries (amendment) regulations, December 2005	2004 showed further increases. These results are encouraging. MPAs and the prohibition on the use of SCUBA gear coupled with the restriction on fishing to waters between 10 and 50 feet are
	•	Report to Santo Domingo workshop,	additional positive factors. Evidence presented that the 8 marine reserves and the no-take zones are having a beneficial effect on the stock.
			3b) Belize has established a standardized mean weight of processed and unprocessed meat that is defined as being of legal size (85g 'market clean', 114g processed and 170g unprocessed).
			3c and 3d) All Belizeans boats are required by law to be licensed before being allowed to fish commercially. Licenses must be renewed annually. All exports require a CITES permit. A fishery
			catch and effort programme is in place at two of the five fishing cooperatives, with plans to extend it to the other three sites in 2005.
			3e) The Fisheries Department will undertake annual stock assessments on a number of the major

			2 - 1-1
			4a) Belize made good progress with its annual assessments and frequent biomass surveys. Conch
			catch and export quotas are to be reviewed on a bi-annual basis and adjusted according to the results of the biomass surveys. The main management measures concerning the S. giga fishery were incorporated in an amended Fishery Regulation in 2005 to ensure implementation.
			4b) Belize cooperated well with CRFM and, through the Mesoamerican barrier Reef System Project with the governments of Guatemala, Honduras and Mexico. The law enforcement capacity was good and effective. Population assessments and research progressed well.
Colombia	 Evaluation of S. gigas status in the Del Rosario and San Bernardo Corales National Park, December 2005 	s status in the Del ardo Corales ber 2005	3a) Catch quotas were established and restricted fishing areas and minimum sizes for harvest were established. Three main fishing areas identified. 3b) Data collected and being analysed for one of the main fishing areas.
	Report to Santo Domingo workshop, December 2005	ingo workshop,	3c) and d) Data collection system implemented for Guajira peninsula (Rosario and San Bernardo), and under development for San Andres archipelago. Management plans for these areas, including zoning, were or are being developed.
			3e) Under development at national and regional level.
			4a) Reductions in quotas in the Archipiélago de San Andreas indicates adaptive management taking place. No harvest was allowed in 2005 in view of paucity of stock assessment information for 2003 and 2004. A series of studies were initiated to establish the 2006 quota.
			4b) Detailed studies undertaken in one of the three fishing grounds. Hosted an international scientific workshop on queen conch management San Andres in November 2005.
Cuba	 Sustainable queen conch (Strombus gigas) fishery management in the main fishing grounds off the Cuban coast, May 2004 Report to Santo Domingo workshop, December 2005 	nch (Strombus ement in the main le Cuban coast, ingo workshop,	3a) Catch and export quota were established. Estimated average density of conch on the traditional fishing grounds was 2,800/ha which, i.e. very high. SCUBA gear is prohibited and fishing is restricted to 3-10 m; a minimum size limit of a lip thicker than 8mm is in place. 16 research and monitoring cruises in seven traditional fishing areas were undertaken since 1999. Details were provided. 3b) Conversion factors that relate individual meat weights, cleaned to various degrees, were provided. 3c) Strict control were kept over the levels of capture, fishing areas and the use of queen conch as bait, with the application of fines and sanctions established by law.
			Hajor Institute aleas of all all allitude to braining basis. 4a) The total annual catch should not exceed 15-20% of the estimated biomass outside protected areas and annual export quotas are based on results from scientific monitoring, which together indicate an adaptive management approach. 4b) Strict controls are to be maintained by fisheries inspectors.

Dominica*	 Report to Santo Domingo workshop, 	mingo workshop,	Marginal, occasional fishery and virtually no trade in S. gigas; no exports but illegal trade to France
	December 2005		suspected;
			Size and age limitations in place
			Participated in regional management plan fort the species under auspices of CFRM
			Undertook sensation and education activities
Grenada	No response		
Nicaragua	 Results of explorate 	Results of exploratory fishing for queen	3a) Annual export quotas established; good biological data available in the country
	conch (Strombus gigas) in the nor	conch (Strombus gigas) in the northern	3b) Decree DGRN-PA-No341-2003 established a minimum legal size of 200 mm and the minimum
	Mical agual Calibbe	all, Ivlay 2004 monogoment of the	weight of processed meat of 172 grams. The defined minimum legal size and minimum weight
	Action plan for the avaloitation of allee	Action plan for the management of the exploitation of queen conch. Strombus	were supported by brotogical and recrimical studies.
	gigas, in the Nicaraguan Caribbean,	guan Caribbean,	3d) There is no system of permits and licenses specific for the queen conchitishery as queen conch is caught as an accessory species in the fishery for lobsters. An Action Plan has been
	November 2004		elaborated to research and develop systems for monitoring the queen conch fishery. Data available
	 Sampling of queen conchs from the 	conchs from the	include the total volumes of meat stored in processing plants and the weight of meat that is
	Central American fisheries processing	sheries processing	processed and exported. Two programs of data collection exist: a program to assess the resource
	plant of confibration in the Nical agual. Caribbean, February 20	i in the Mical aguair 7.20	through exploratory rishing and oriboard blooghear morning or the catch, and arother to morning the size and weight of queen conch at the processing plants.
	 Report to Santo Domingo workshop. December 200505 	mingo workshop,	3e) Density studies in 2004 off northern Nicaragua estimated mean density of adults of 112 ind./ha (confidence intervals $30 - 194$ ind./ha.).
			4a) Nicaragua is planning to undertake a similar approach to measure densities and establish harvest and export quotas as the one described by Honduras; funding for this research programme
			ilas been obtained.
			4b) Nicaragua collaborates with Honduras, Columbia, Belize and Jamaica on scientific matters concerning S. gigas. Nicaragua implemented decrees in 2003 that establish measures for the
			Indiagement of queen concit, such as fishing closure from June to September, fillingfull 1826 of 200 mm and minimum weight of processed meat of 172 grams, and the export quota of 100,000
			pounds of processed meat (100% clean), specifying sanctions and the conditions for monitoring and surveillance by the enforcing agencies.
Saint Kitts and Nevis	 Briefing on the implementation of 	ementation of	3a) implementation of closed areas and seasons in 2005.
	Resolution Conf. 12.8, May 2004	2.8, May 2004	3b) A minimum weight of 225g after removal of the digestive gland established
	Report to Santo Domingo workshop.	mingo workshop,	3c) A monthly fishery data collection programme is in place.
	December 2005		3e) Support for stock assessment has been requested from CARICOM
			4a) New fisheries data collection system in place and training initiated in 2005 (fully operational in 2005): closed certain fishing grounds in consultation with stakeholders
			Ab) Working with CABICOM (through CDEM) anhanced controls of S. gigas shinmants hafara
			4b) Worning with CARCOM (unough CARTM), emigriced controls of 3: gigas sinplinents before export; new CITES legislation developed

Saint Lucia	•	Project proposal – conducting an assessment of the conch resources of	3a) Established minimum size and age regulations and a limited entry system, including a limitation of the use of SCUBA.
	•	Saint Lucia, 2005 Report to Santo Domingo workshop, December 2005	3b) Legislation prohibits the harvesting of conch less than 180 mm total shell length, less than 1kg total weight and less than 280g meat weight excluding digestive glands; harvesting of immature conch, defined as those without a flared lip, restricted
			3c) and d) Only licensed vessels are allowed to participate in the fishery and any exports require a permit. Limited resources are preventing the implementation a fishery data collection system. Biannual assessments of shell stockpiles are undertaken to monitor length frequencies but this will not be sufficient to allow for monitoring total catch and effort as a means of estimating trends. Project proposal submitted to CITES Secretariat on these issues.
			3e) Long-term population monitoring would be undertaken as part of the project proposal mentioned above.
			4a) Adaptive management procedures are to be developed in conjunction with the project mentioned above.
			4b) St Lucia is cooperating closely with CRFM and the CFMC; difficulties in law enforcement resulting from limited surveillance capacity of the Marine Police and Fisheries Department, isolated fishing grounds and lack of support from French authorities in controlling illegal trade to Martinique.
Saint Vincent and the Grenadines	•	Update on progress relative to CITES in St. Vincent and the Grenadines, July	3a) Adopted a policy not to allow exports to exceed the 2002 levels. Enacting an innovative multicriteria system for determining catch and effort quotas.
	•	2005 Report to Santo Domingo workshop,	3b) A standardised minimum meat weight has been estimated and limits identified for live adults (shell length and flared lip) and cleaned meat weight.
		December 2005	3c) and d) catch and effort data are collected regularly and at the various landing sites and fish markets, but difficult to implement a proper sampling programme and collect reliable effort information; landings and export data are regularly reported to CITES.
			3e) St Vincent is developing a long-term management plan for all indigenous endangered species.
			4a) The country is negotiating a system for setting annual catches and the proposed system incorporates an adaptive component. Request to FAO for funding submitted through CFRM.
			4b) St Vincent cooperates well with CRFM and other CARICOM and CARIFORUM countries; achieving effective enforcement remains a problem; planning to undertake surveys and implement
Trinidad and	•	Report to Santo Domingo workshop,	Marqinal, artisanal fishery on Tobago only
Tobago*		December 2005	4a) Project initiated (October 2005-September 2006) to develop marine fishery policy and finalize fisheries management act, providing legislative and management framework for implementing CITES recommendations; protected areas in Tobago
			4b) Liaison with CFRM; a Fisheries Monitoring Surveillance and Enforcement Unit is being established (operational in 2005); Participated in relevant scientific workshops in2004 and 2005 in Barbados