



## **Regional Learning Exchange on Stony Coral Tissue Loss Disease for Caribbean Marine Natural Resource Managers**

**Key West, Florida,  
1-2 August, 2019**

### **Executive Summary**

1. Stony coral tissue loss disease (SCTLD) is no longer just a Florida problem. Unfortunately, other locations in the Caribbean have started to see similar disease signs and, as of August 1, 2019, the disease is confirmed in the Caribbean countries and territories of Jamaica, Mexico, Sint Maarten, the Dominican Republic, the U.S. Virgin Islands (St. Thomas), the Turks and Caicos Islands and Belize. A regional peer-to-peer learning exchange on SCTLD was hosted in Key West on August 1-2, 2019 by the MPAConnect Network, a partnership between the Gulf and Caribbean Fisheries Institute and the US National Oceanic and Atmospheric Administration's Coral Reef Conservation Program, with funding from NOAA CRCP and the NFWF Coral Reef Conservation Fund.
2. The Key West learning exchange provided capacity-building support to Caribbean countries and territories currently affected by SCTLD and susceptible to the disease. The involvement of marine natural resource managers from across the Caribbean allowed for the wide dissemination of information about the disease and also served to establish an inclusive pan-Caribbean network of managers, mentors and experts to help monitor, detect and respond to SCTLD in the region. Already the network is playing a role in assisting members with technical assistance for coral disease identification, the interpretation of monitoring results, sharing advice and contacts on treatment protocols and guiding outreach to decision makers.
3. SCTLD is contagious between individual corals and between coral species. It does not affect humans. It is water-borne and can also spread through contact. Work is ongoing to determine the pathogen(s) involved and although it has not yet been determined, antibiotics have arrested disease progression in both laboratory and field experiments, so a bacterial component is highly likely.
4. The correct identification of SCTLD depends on multi-factor field diagnosis based on the characteristics described on the MPAConnect poster guide to SCTLD.
5. The learning exchange participants recommended that a multi-step SCTLD monitoring approach be adopted at the regional scale by existing programs such as the Global Coral Reef Monitoring Network (GCRMN) and Reef Check. See the findings below of the working group on monitoring for more details

about step-wise implementation of manta tows-roving diving surveys-AGRRA-type monitoring-repeat surveys-treatment monitoring.

6. An online platform for reporting and verification of suspected cases of SCTLD can be found at <http://www.agrra.org/coral-disease-outbreak/>. Caribbean marine natural resource managers and their partners are encouraged to use this platform for shared reporting of SCTLD. Participants recommended the development of a dashboard on the AGRRA site to indicate the regional status of SCTLD and the progression of the disease.
7. In order to prevent the spread of SCTLD, no-cost best practices such as diving healthy reefs before diving infected reefs are recommended. Local rental of dive and snorkel gear is recommended. Decontamination of gear involves soaking for 10 mins in 1% bleach solution, rinse in fresh water, air dry. The wash solution should be left out in the sun for 1 day to break down the bleach and it can then be disposed of without causing pollution.
8. Spread of SCTLD by water also raises links with the shipping industry, including tankers and cruise ships, with the exchange of ballast and other water away from coral reefs likely to help prevent the spread of SCTLD. There is an opportunity for Caribbean marine natural resource managers to raise the issue of SCTLD with their colleagues in shipping/ports at the March 2020 meeting of Regional Maritime Administrators and with the Florida-Caribbean Cruise Association.
9. The recommendation from SCTLD experts in Florida is to treat the disease as quickly and as aggressively as possible once identified in new locations. Large-scale field trials indicate that the best practice is currently the application of amoxicillin powder with CoreRx Base2B in a 1:8 ratio. Participants noted possible regulatory obstacles to the use of antibiotics on corals in their countries, with a need to get agencies on board to grant necessary approvals. Securing an affordable supply of CoreRx Base2B material has been the focus of efforts by NOAA, GCFI and AGRRA with free samples now shipped to some of the affected locations.
10. Selection criteria must guide the prioritization of SCTLD-affected coral reef sites and coral colonies for treatment - large coral colonies close to others of the same species are priorities for treatment, and colonies with a large amount of remaining tissue and a small number of active lesions are considered more treatable. Site selection criteria relate to the regulatory framework, for example, sites within an MPA may respond more positively to treatment since they may not be affected by additional stressors such as fishing pressure.
11. Crisis communications measures are justified by managers in the face of the threat posed by SCTLD to coral reefs and associated economies with unified messaging by agencies and careful choice of language.
12. SCTLD has implications for many aspects of MPA management. A key recommendation for managers in affected and susceptible countries/territories/MPAs is to treat this disease outbreak seriously and to put an intervention action plan in place.

13. The learning exchange working group on restoration suggested that Caribbean marine natural resource managers consider exploring bio-banking local corals in order to save genetic diversity, and to consider incorporating stony corals in coral restoration efforts, but with caution about local capacity and caveats about feasibility as detailed in this report.
  
14. Next steps are to develop communications materials desired by participants including: outreach materials to encourage decontamination of dive gear and to encourage detection of SCTL D by divers; communications to promote regional uptake of recommended monitoring protocols and a reporting platform; documentation for use in discussions with maritime administrators; a presentation to justify the recommended treatment protocol; a template intervention action plan. Establish a regional SCTL D monitoring dashboard. Consider proposed small support for practical local action by some of the learning exchange participants.