

SCTLD Quick Facts

Background

Stony coral tissue loss disease (SCTLD) is a **disease of corals** that first appeared off the southeast coast of Florida in 2014. By 2019 it had spread along the **Florida Keys** and had appeared elsewhere in the **Caribbean Sea**.

The disease destroys the soft tissue of at least 22 species of reef-building corals, killing them within weeks or months of becoming infected. The causal agent is unknown but is suspected to be a **bacterium**, although more recent studies suggest a virus. The degree of susceptibility of a coral, the symptoms, and the rate of progression of the disease vary between species. Due to its rapid spread, high mortality rate, and lack of subsidence, it has been regarded as **the deadliest coral disease ever recorded**, with wide-ranging implications for the biodiversity of Caribbean coral reefs.

SCTLD in Dominica

The disease arrived in Dominica in 2021 at the northern dive sites around Portsmouth. It then traveled south to our dive sites here in the Soufriere Scotts Head Marine Reserve (SSMR), arriving in early 2022. We knew that it was coming, so we were able to prepare to the best of our abilities: fighting this intrusion takes both financial resources and a lot of manpower, two things that were in short supply!



Coral with SCTLD Lesion



Coral with Treated Lesion

Fighting SCTLD

The only successful intervention method currently known for SCTLD is to administer the **antibiotic amoxicillin** mixed with a marine-safe epoxy to the coral via a syringe. Treated corals are then monitored and re-treated as needed.

SCTLD Intervention at Nature Island Dive



We have been on the forefront of this battle and have taken the following initiatives to help fight against SCTLD and save our Stony Coral.

Treatment

The treatment is mixed here in the shop on a daily basis and our divemasters carry a few syringes with them on every dive. If conditions permit, we will treat some corals on every dive. In addition, we have a small volunteer group who apply treatment to affected corals on a daily basis.



Monitoring

Prior to SCTLD's arrival, we performed many coral surveys to document pre-disease conditions. We also tagged corals considered 'iconic' due to their unique size or species. The conditions of all tagged corals are noted and reported when they are encountered during dives. At one dive site we are documenting every coral treated and compiling data on the effectiveness of our efforts.

Future Re-propagation

We are assembling 'coral trees' and placing them in areas we hope to be relatively free of SCTLD. Small pieces of various species of coral are then raised on plates attached to the branches of the trees. The long term goal of this effort is to have living examples of coral that can be re-planted on the reefs.

Rev 05.2022