



*Championing UK's most special species:
the wildlife of UK's Overseas Territories (UKOTs) and
Crown Dependencies (CDs)*

FACT-SHEET ON:

**Staghorn Coral *Acropora cervicornis*
and Elkhorn Coral *Acropora palmate***

UK Overseas Territory: Cayman Islands (and other Caribbean UKOTs)

Staghorn Coral and Elkhorn Coral are two species of stony coral found across the Florida Keys, the Bahamas and the Caribbean Islands, including all the Caribbean UKOTs.

Importance: They are some of the most important Caribbean corals in terms of contribution of reef-growth and habitat for many species, e.g. reef fishes, crustaceans and marine molluscs. They provide enormous economic benefits for coastal communities, including food security and income generated from tourism. Some studies have looked at the value of corals reefs to the local economy. One such study found that the value of the coral reefs for coastal protection in the Turks and Caicos Islands is estimated at around US\$17 million per year. The total economic value of coral reefs is estimated at approximately US\$47 million per year.

Ecosystem: Like most corals, these are colonial organisms, made up of hundreds of individual animals called polyps. Most reef building corals, such as *Acropora* species, contain photosynthetic algae called zooxanthellae. The coral and algae both get something out of this relationship. The coral provides a protected environment for the algae and compounds needed for them to photosynthesize. In return, the algae provides corals with essential nutrients needed to grow.

Threats: Corals are sensitive to their environmental conditions. If they become stressed, for example by changes in sea-temperature, they may expel their zooxanthellae. This explains the dramatic white appearance known as 'coral bleaching'. Storm surges, sedimentation pollution, disease and disturbance caused by human activity and are also major stressors. A recent, dramatic new threat is the bacterial disease causing Stony Coral Tissue Loss Disease (SCTLD), which appears to be spread at least partly as a result of human actions. This is devastating stony corals in Florida, Turks & Caicos Islands (TCI) and the British Virgin Islands, where trained volunteers are attempting to limit, by labour-intensive careful application of antibiotic paste in individual corals, the rapid death of corals and destruction to reefs.

Needs: Reducing the impact of human activity on land would be a major contribution to conservation efforts. These include: water conservation to reduce run-off and wastewater, reduction of (single-use) plastics and other pollutants, limiting disturbance (e.g. through recreational activities and sustainable fishing practices), reducing impact of invasive species introduced accidentally by humans (e.g. lionfish), and treating SCTLD. Across many of the UKOTs, efforts to conserve coral-reef ecosystems include, amongst others, research conducted at Central Caribbean Marine Institute, located on Little Cayman; coral reef nurseries are being created by local NGOs, including by the Turks and Caicos Reef Fund, which is also leading the work on SCTLD in TCI.



Above: Elkhorn Corals, Turks & Caicos Islands, © Kathleen Wood
Below: Staghorn Corals, Cayman Islands, © Central Caribbean Research Institute

