

UK Overseas Territories Conservation Forum

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

FACT-SHEET ON:

Caicos Pine *Pinus caribaea* var. *bahamensis* UK Overseas Territory: Turks & Caicos Islands

Importance: The Caicos Pine is the foundation species of the Caicos Islands pine-yard habitat, part of the globally imperilled pine-rockland ecosystem that is limited to southern Florida (where it has been reduced to less than 2% of its original extent), four islands in the northern Bahamas (two of which were significantly impacted by the catastrophic Hurricane Dorian in 2019), and three islands in the Turks and Caicos Islands (North and Middle Caicos and Pine Cay). The pine-yard habitat hosts a number of plant and animal species unique to it. It was the most significant terrestrial natural resource extraction habitat for humans between colonization and built development in the 1960s. The Caicos Pine is also the National Tree of the Turks and Caicos Islands.

Ecosystem: As the foundation species for the Caicos Pineyard ecosystem, the Caicos Pine manages its own habitat by making it a fire-dependent ecosystem. Natural fires burn through the pine habitat, girdling broadleaf species and limiting their growth. This open forest allows other fire-tolerant species such as palmettos and vines to thrive, and ensures the survival of at lease nine species of symbiotic fungi, at least one of which is unique to the Caicos Islands pine forests.

Threats: Caicos Pine is threatened primarily by the introduced pine tortoise-scale insect *Toumeyella parvicornis* which was introduced on live-cut Christmas trees from the United States. The problem was first discovered during a biodiversity study organised by UKOTCF. The infection reduced the natural pine trees by about 90% a decade ago. It is additionally threatened by the newly introduced Mediterranean black aphid (also introduced on Christmas trees), and potentially by other pests of pine trees. Climate change is a serious threat, due to intrusion of salt-water into the low-lying habitat, and through increase in hurricanes to which the Pines are only somewhat resistant.

Needs: The most significant need for the protection of the



Above: a remnant of the Middle Caicos Caicos pine-yards, with almost all trees dead or dying after infection by the humanintroduced disease. © Dr Mike Pienkowski, UKOTCF

Caicos Pine is continual, recurrent funding toward the active management of the habitat. Currently, despite major progress in helping the Caicos Pine recovery, the habitat management is crippled by understaffing and lack of recurrent long-term funding.

Below: Work is in progress to try to find and encourage resistant plants. The Caicos Pine Recovery Project Nursery was completely destroyed by extreme Hurricane Irma in 2017. Wise placement of trees and seedlings by Junel Flash Blaise is what saved all of the trees but one from lethal damage. Bryan Naqqi Manco adds: "We will complete the new expansion nursery site and move directly in when complete." © Bryan Naqqi Manco

