

Tasmania fires may 'wipe out' ancient species

February 15 2019



Australia has been hit by wildfires in recent months, which scientists say have been made worse by climate change

Tasmania's ancient rainforest and alpine flora species face an uncertain future, scientists have warned, after out-of-control bushfires consumed vast tracts of wild bushland.

As authorities downgraded emergency warnings Friday, with wetter weather—and even some snow—bringing respite from more than a month of rolling fires, scientists warned they are still assessing the damage to the island's unique environment.

Wildfires have scorched over 205,000 hectares (500,000 acres) in the southwest, centre and northwest of the island—fuelled, scientists believe, by [climate](#) change.

Most of the native eucalypt forests have adapted to frequent burning, but Tasmania is a refuge for ancient [species](#), whose presence dates back millions of years to when Australia was part of a supercontinent called Gondwana.

Located in the Tasmanian Wilderness World Heritage Area, these species are more accustomed to ice ages than bushfires, and include the slow-growing Pencil Pine, King Billy Pine and Cushion Plant.

They require a "cool, very permanently wet and fire-proof" environment, David Bowman, Professor of Environmental Change Biology at the University of Tasmania, told AFP, after a trip to inspect the burnt wilderness.

"It's like a bonsai garden gone berserk" he said describing the species. "Some of the trunks of these pencil pines are 1,000 years old, but they're clonal, so they have been there for 10,000 years."

"They're resilient to ice ages but when you warm the climate they are completely toast."

While scientists remain hopeful that rainforests were wet enough to repel the worst fire damage, [climate models](#) show a trend towards greater drying of western Tasmania and an increase in the dry lightning

thunderstorms responsible for sparking the recent blaze.

Nick Earl, Climate Research Fellow at the University of Tasmania, and his colleagues warned in a recent paper that [climate change](#) may permanently alter the viability of these ecosystems.

"Some regions of the west coast of Tasmania used to have very little to no risk of bushfires as they were always damp. However, this is no longer the case, resulting in species coming under threat," they wrote.

"Endemic species like Pencil Pine, Huon Pine and Deciduous Beech may be wiped out by one fire."

This risk has prompted calls for more resources to be made available for remote area firefighting to safeguard irreplaceable ecosystems.

"Pencil pines are really the plant equivalent of the Tasmanian Tiger or the Tasmanian devil," Bowman said.

"They're serious business for us culturally."

© 2019 AFP

Citation: Tasmania fires may 'wipe out' ancient species (2019, February 15) retrieved 26 April 2024 from <https://phys.org/news/2019-02-tasmania-ancient-species.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--