

**TITLE** **ALTERED CLIMATE LEADS TO POSITIVE DENSITY-DEPENDENT FEEDBACKS IN A TROPICAL WET FOREST**

<b>PUBLICATION TYPE</b>	Journal Article
<b>YEAR</b>	2020
<b>AUTHORS</b>	Benedicte Bachelot, Aura M. Alonso-Rodríguez, Laura Aldrich-Wolfe, Molly A. Cavaleri, Sasha C. Reed, and Tana E. Wood
<b>JOURNAL</b>	Global Change Biology
<b>VOLUME</b>	26
<b>PAGINATION</b>	3417-3428
<b>KEY WORDS</b>	arbuscular mycorrhizal fungi, climate change, negative density dependence, positive density dependence, tropical wet forest
<b>ABSTRACT</b>	Climate change is predicted to result in warmer and drier Neotropical forests relative to current conditions. Negative density-dependent feedbacks, mediated by natural enemies, are key to maintaining the high diversity of tree species found in the tropics, yet we have little understanding of how projected changes in climate are likely to affect these critical controls. Over 3 years, we evaluated the effects of a natural drought and in situ experimental warming on density-dependent feedbacks on seedling demography in a wet tropical forest in Puerto Rico. In the +4°C warming treatment, we found that seedling survival increased with increasing density of the same species (conspecific). These positive density-dependent feedbacks were not associated with a decrease in aboveground natural enemy pressure. If positive density dependent feedbacks are not transient, the diversity of tropical wet forests, which may rely on negative density dependence to drive diversity, could decline in a future warmer, drier world.
<b>LINK</b>	<a href="https://doi.org/10.1111/gcb.15087">https://doi.org/10.1111/gcb.15087</a>