

Nation of Change

‘Frightening:’ Plant extinction is occurring 500 times faster than before human intervention

"Plant extinction is bad news for all species."

[Alexandra Jacobo](#) / [NationofChange](#) / News Report - June 12, 2019



Nearly 600 plant species have gone extinct in the last 500 years, many due to human intervention, says a new study from the Royal Botanic Gardens, Kew and Stockholm University.

Scientists at Royal Botanic Gardens, Kew and Stockholm University gathered data from plant extinction records from all over the world. This first-of-its-kind study, published in [Nature Ecology & Evolution](#), shows that 571 plant species have disappeared in the last 250 years. This is twice the number of animal species lost in the same time frame. This amount is also four times the number botanists previously estimated.

The rate of extinction for plants is as much as 500 times faster than the ‘natural’ background rate of extinction, or the normal rate of loss before human intervention, the study states. Animals have it worse, at a rate at least 1000 times faster.

Authors of the study warn that these numbers underestimate the true levels of ongoing extinction. True extinction rate may be higher, due to the fact that there are thousands of “living dead” plant species, which cannot reproduce because only one sex remains or the type of animals needed to spread their seeds is extinct.

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These new conclusions spell ‘bad news for all species.’ The authors believe that understanding plant extinction is imperative, as “plants underpin all life on earth.”

“Most people can name a mammal or bird that has become extinct in recent centuries, but few can name an extinct plant. This study is the first time we have an overview of what plants have already become extinct, where they have disappeared from and how quickly this is happening. We hear a lot about the number of species facing extinction, but these figures are for plants that we’ve already lost, so provide an unprecedented window into plant extinction in modern times,” said Dr. Aeelys M Humphreys, Author and Assistant Professor at the Department of Ecology, Environment and Plant Sciences at Stockholm University.

The highest rates of plant extinction are on islands, in the tropics, and areas with a Mediterranean climate. Human activity is the leading cause of extinction, usually due to cutting down forests or converting lands for farming. “The finding that extinction rates are highest in biodiversity hotspots that are at risk due to land-use change is alarming,” said ecologist Bjorn Robroek.

[Alexandra Jacobo](#)

Alexandra Jacobo is a progressive writer, activist, and mother who began her political involvement in earnest passing out blankets to occupiers in Zuccotti Park in 2011. She is concerned with educating the public and inspiring them to take action on progressive issues that promote positive change at home and abroad.

“Plants underpin all life on earth, they provide the oxygen we breathe and the food we eat, as well as making up the backbone of the world’s ecosystems – so plant extinction is bad news for all species. This new understanding of plant extinction will help us predict (and try to prevent) future extinctions of plants, as well as other organisms. Millions of other species depend on plants for their survival, humans included, so knowing which plants we are losing and from where, will feed back into conservation programmes targeting other organisms as well,” says co-author Dr. Eimear NicLughadha.

Authors of the study believe that in order to curb plant loss, “we need to record all the plants across the world.”

“To do this we need to support herbaria and the production of plant identification guides, we need to teach our children to see and recognize their local plants, and most importantly we need botanists for years to come,” said Maria Vorontsova, co-author of the study.

This alarming news comes on the heels of the [UN’s report](#) that announced human-caused mass extinction could wipe out one million plant and animal species. That report also warned of the implications of human-caused habitat loss and land-use change.