More than half of tree species found only in Europe could become extinct, study shows

By Rory Sullivan, CNN

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The horse chestnut tree, Aesculus hippocastanum, is one of Europe’s threatened species. (CNN)

More than half of Europe’s endemic trees -- species that are only found in the region -- are at risk of extinction because of diseases, pests and human activities, a conservation organization based in Geneva has said.

The International Union for Conservation of Nature (IUCN) Friday released its findings as part of its newly published European Red List of Trees. While the European Red List had already assessed 15,000 species, including vertebrates, freshwater molluscs and trees, the latest study focused on the dangers to lesser-known species.

In total, 58% of Europe’s endemic trees are at risk of dying out -- as well as more than two-fifths of the continent’s 454 native species.

The horse chestnut -- native to Bulgaria, Greece, Albania and the Republic of North Macedonia but widespread elsewhere in Europe -- is among those in danger.

It has been deemed “vulnerable” to extinction because of a decline caused by the leaf-miner moth -- whose caterpillars feed on its leaves -- forest fires, logging and tourism.

In the UK, three types of whitebeam that were only discovered 10 years ago are now critically endangered. They belong to the “Sorbus” genus, which is particularly affected -- three-quarters of its 170 species are at threat, the IUCN said.

Craig Hilton-Taylor, head of the IUCN Red List Unit, said: “It is alarming that over half of Europe’s endemic tree species are now threatened with extinction.

*Trees are essential for life on earth, and European trees in all their diversity are a source of food and shelter for countless animal species such as birds and squirrels, and play a key economic role.*

He called for cooperation between the European Union, regional assemblies and conservationists to overcome the threat.

The latest assessments show that it is not only trees that are endangered -- almost half of Europe’s shrubs and more than a fifth of land molluscs are at risk of extinction.

Luc Bas, director of IUCN’s European Regional Office, said: “This report has shown how dire the situation is for many overlooked, undervalued species that form the backbone of Europe’s ecosystems and contribute to a healthy planet.

*We need to mitigate human impact on our ecosystems and prioritise the protection of these species.*
Almost 600 plant species have become extinct in the last 250 years

By Julia Hollingsworth, CNN

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Almost 600 plant species have been wiped from the planet in the past 250 years, more than twice the number of bird, mammal and amphibian species that have met the same fate, according to a new study.

The research -- published Monday in Nature, Ecology & Evolution journal -- found that 571 plant species have disappeared from the wild worldwide, and that plant extinction is occurring up to 500 times faster than the rate it would without human intervention.

For comparison, the researchers said animal extinction is occurring at least 1,000 times faster than the normal rate of extinction, however the report notes that researchers believe the plant extinction rate has been underestimated.

The Royal Botanic Gardens, Kew and Stockholm University researchers say it’s the first time scientists have compiled a global overview of which plants have already become extinct.

“Most people can name a mammal or bird that has become extinct in recent centuries, but few can name an extinct plant,” report co-author Aleys Humphreys said.

Plants on islands, in the tropics and in Mediterranean climates had the highest rates of plant extinction, as these were areas home to unique species vulnerable to human activities. The study said the increase in the plant extinction rate could be due to the loss of habitat of species located in a small geographic area.

Some examples of plants that have gone extinct in the past two centuries are the aromatic Chile sandalwood and the banded trinity, which has no leaves -- only its flowers are visible above the ground.

The endangered acacia tree in Riau Province, Sumatra, Indonesia. The business of pulp, palm oil and wood are causing the deforestation of Sumatra and contributing to the extinction of many of the world’s rare species.

The issue is bigger than plants -- the authors said plant extinction had knock-on effects, including on humans.

“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,” co-author Eimear Nic Lughadha said in a statement. “Millions of other species depend on plants for their survival, humans included.”

But there was one positive from the paper: 430 species once considered extinct had gone on to be rediscovered. However, the authors noted that 90% of rediscovered species had a “high extinction risk.”

The research is the latest in a string of grim studies about the effects of humans on the world. In May, a landmark report released by a United Nations committee found that one million of the planet’s eight million species are threatened with extinction.

The global rate of species extinction “is already tens to hundreds of times higher than it has been, on average, over the past 10 million years,” the report said, noting that the world is likely to lose 1 million of its species in the next few decades.
years," according to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), a UN committee, whose report was written by 145 experts from 50 countries.