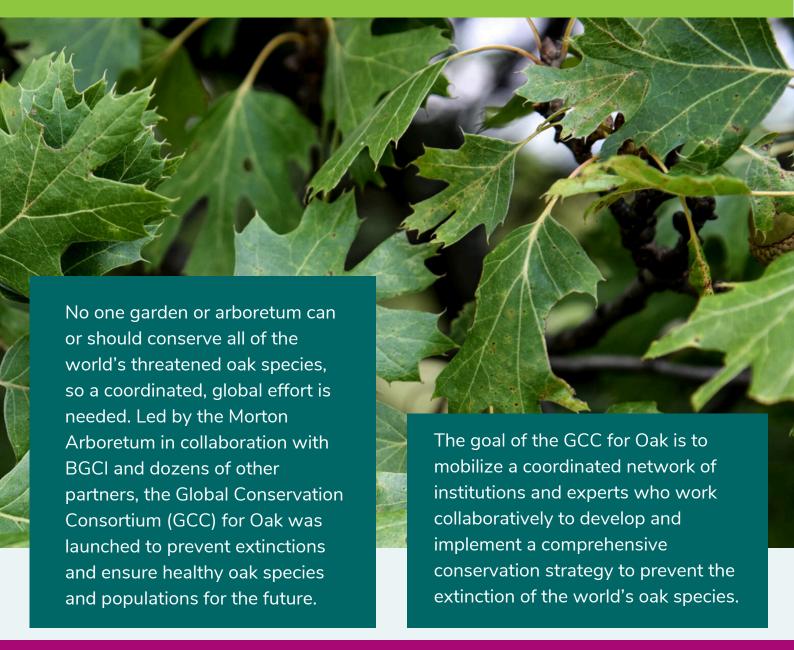




About the Global Conservation Consortium for Oak

The Global Conservation Consortium for Oak brings together the world's oak experts, conservationists, and the botanic garden community to ensure that no wild species of oak becomes extinct.

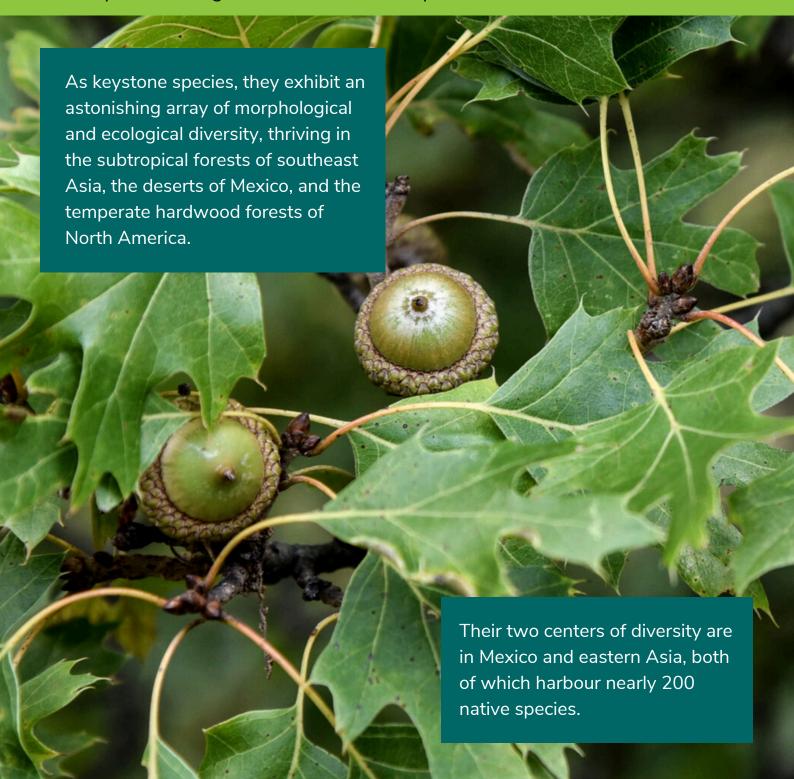






About Oak

Comprising around 450 species, oaks are found in forest and shrubland ecosystems throughout the northern hemisphere.





Lead Institution

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THE CHAMPION of TREES

Current Steering Committee Members:



Dr. Silvia Alvarez-ClareThe Morton Arboretum
United States



Dr. Murphy WestwoodThe Morton Arboretum
United States



Allen J. Coombes Jardin Botanico Universitario BUAP Mexico



Dr. Maricela RodriguezMexico



Dr. Hoàng Văn Sâm Vietnam National University of Forestry Vietnam



For questions or more information, or if you are interested in learning more about current GCC for Oak activities please contact Amy Byrne, GCC for Oak Coordinator or Karina Orozco



Uses





Threats

Despite their great economic, ecological, and cultural value, many oaks are under threat of extinction. Threats including habitat destruction, climate change, modification of natural systems, pests, and diseases are impacting oak populations around the world.

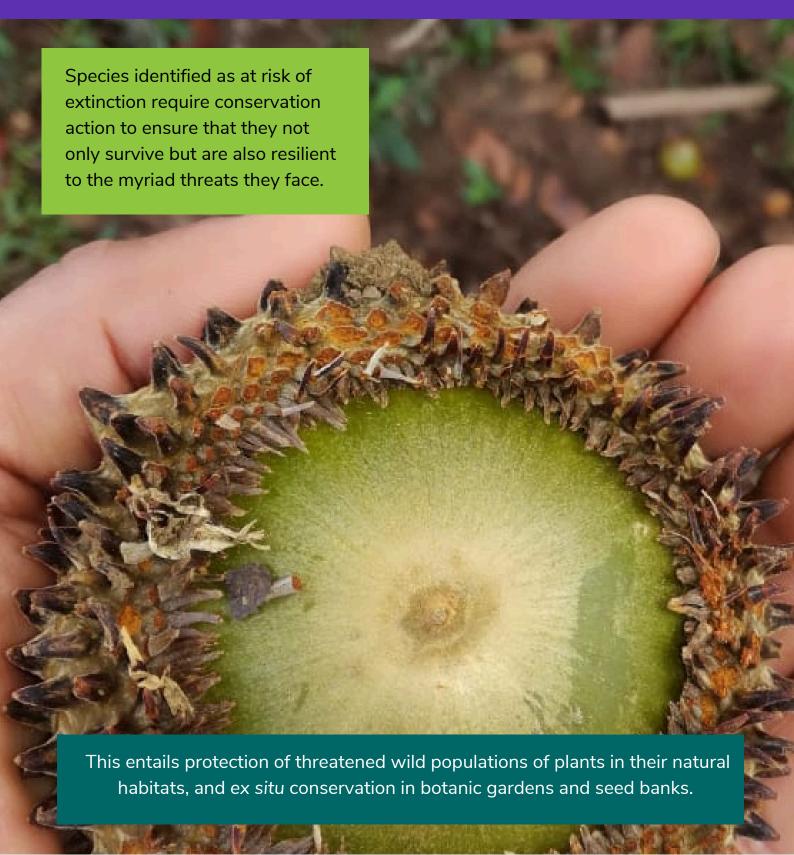


As part of the Global Tree Assessment, The Morton Arboretum leads efforts to compile IUCN Red List threat assessments for all of the oak species. The Red List of Oaks (Carrero et al., 2020) reveals that at least one-third of the world's oak species are at risk of extinction.

This report, including a comprehensive ex situ collections survey, was published in 2020, updating the 2007 Red List of Oaks (Oldfield and Eastwood, 2007) including more than twice the number of species previously assessed.



Conservation Action





Conservation Action

Because oaks are "exceptional species" – their acorns do not survive the low temperature and humidity conditions of a standard seed bank – these species require alternative methods for effective ex situ conservation of genetic diversity.



Living collections of trees and cryopreservation of embryos and vegetative (growth) tissues are two solutions to this challenge, but these require more time, expertise, and management than standard seed banking.

Thus, oaks are in urgent need of a coordinated, global effort to efficiently and effectively preserve species and populations both in their native habitats and in ex situ collections.



Operational Regions

United States

There are 91 native US oaks. The GCCO is focusing on 29 species of conservation concern, under the coordination of <u>Amy Byrne</u> (The Morton Arboretum).

Mexico and Central America Mexico is an important centre of diversity for oaks with more than 168 species distributed across multiple habitats, with around 32 species that are threatened in the wild. Dr. Maricela Rodriguez is coordinating the GCCO in Mexico and Central America, focusing efforts on the priority, threatened and Data Deficient species in this region, outlined in The Red List of Oaks 2020 report.

China

With around 117 oak species, of which 36 are threatened, China is another important diversity hotspot for oaks. Dr. Yi-Gang Song from Shanghai Chenshan Botanical Garden is coordinating oak conservation efforts in this region, focusing on the priority threatened, and Data Deficient species, outlined in The Red List of Oaks 2020 report.

Southeast Asia There are around 86 oak species in Southeast Asia. 36 species are threatened. Dr. Hoàng Văn Sâm and other partners are coordinating efforts in Vietnam, Laos, Thailand and Cambodia. Focus in this region is on the priority threatened, and Data Deficient species, outlined in The Red List of Oaks 2020 report.

