



CENTER FOR PLANT CONSERVATION

CPC Climate Change Paper

Background: As part of the advocacy efforts aligned with the mission to protect native and endangered plant species of the United States and its territories whose natural ranges extend into Canada and Mexico, The Center for Plant Conservation (CPC) is posting its Position Paper on Climate Change.

Climate Change and Threatened and Endangered Plants

The mission of CPC is to prevent native plant extinctions. The need is urgent to ensure the survival of imperiled plants facing dire consequences of Climate Change disruptions, exacerbated by habitat destruction, reproductive isolation, declines in pollinators, and ecological competition from invasive plants and animals. Human activities, including burning fossil fuels, greenhouse gas emissions, and the destruction of carbon sinks that absorb carbon dioxide are major culprits of Climate Change. The last seven years have been the warmest on record (1) and have been accompanied by rising sea levels, extreme weather events, and frequent massive wildfires. Climate Change alters the timing of plant flowering, thereby affecting pollination and seed set, with consequent impact on the availability of fruits and seeds for birds and other creatures. The range of some species has shifted or contracted, and there are ongoing declines in plant populations. Climate change adversely impacts humans and wildlife, by which we mean native, undomesticated plants and animals.

CPC supports solutions to combat Climate Change:

- *Replacing dependence on fossil fuels with renewable, alternative energies
- *Fostering the resilience of natural systems by preserving and restoring existing carbon sinks, including intact forests, peatlands, native grasslands and other habitats that sequester carbon and provide clean air
- *Maintaining wilderness and forested areas in national, state, and local parks, public lands, wildlife refuges, natural reserves and forests that act as carbon reservoirs
- *Protecting coastal systems that capture "Blue Carbon" or carbon dioxide from the coastal ecosystems, and that provide aquatic habitat for invertebrates and other life
- *Promoting living shorelines of natural materials and plants that store carbon
- *Encouraging regenerative, no-till farming to sequester carbon and enrich the soil
- *Using green buffers with native flora in transportation corridors and in public gardens

CPC supports research, education and advocacy:

- *Designating strong legal protection for plants in the Endangered Species Act and State Wildlife Action Plans.
- *Encouraging science-based research and conservation tools to map shifting ranges of imperiled species, monitor the effects of climate change, and develop strategies to prevent plant extinction
- *Supporting seed banks and gene banks with viable, genetically diverse germplasm
- *Expanding leadership initiatives throughout the USA for federal, state, and local funding for timely, science-based collection, conservation and seed banking of imperiled plants to protect biodiversity
- *Adopting models to prioritize sensitive areas and ecosystems to make crucial, time-sensitive, science-based decisions
- *Disseminating information about Climate Change and how it affects rare plants
- *Promoting the importance of protecting rare plants and their pollinators by conveying the interrelationships of species and the realities of extinction
- *Endorsing legislation that provides protections for native, endangered, and threatened plants
- *Educating how individuals can be part of the solution

(1)<https://www.nasa.gov/press-release/2020-tied-for-warmest-year-on-record-nasa-analysis-shows>

*Approved by the Board of Trustees 10/22/2021.