

NYBG

FOR IMMEDIATE RELEASE: November 12, 2020

NYBG Online Symposium Featuring International Experts Will Focus on Extinction of Plants and Strategies to Save an Ever-Increasing Number of Imperiled Species

***Here Today, Gone Forever: Plant Extinction Now and Conservation Strategies for Tomorrow* Builds on Recent Landmark Study of Extinct North American Species**

**Symposium Will Be Held on Two Tuesdays, November 17 and 24, 2020;
11 a.m.–12:30 p.m.**



Three plant species facing threats to their existence are (left to right) the White-topped Pitcher Plant (*Sarracenia leucophylla*), a carnivorous plant imperiled by habitat destruction and illegal harvest for the floral industry; Franklinia (*Franklinia alatamaha*), a species extinct in the wild and now known only in cultivation; and the Yadkin River Goldenrod (*Solidago plumosa*), whose sole population has been largely destroyed by damming the river along which it grows in central North Carolina. Photos by Dr. Robert F. C. Naczi, Amy Highland, and Wesley Knapp

Bronx, NY—Following recent landmark research that found that far more plant species have gone extinct in North America than previously thought, The New York Botanical Garden (NYBG) will hold a two-day online symposium with international experts on the outlook for further plant extinctions and strategies to save imperiled species.

The symposium, ***Here Today, Gone Forever: Plant Extinction Now and Conservation Strategies for Tomorrow***, will be held on two Tuesdays, November 17 and 24, 2020, from 11 a.m. to 12:30 p.m. Over the course of the symposium, eight experts in biodiversity, conservation, and extinction will present the state of knowledge about the plant extinction crisis, including trends, causes, and consequences. In addition, they will discuss strategies for preventing future precipitous declines in biodiversity. Each day, opportunities for asking questions and engaging in discussion with the scientists will follow their presentations.

“The topic of plant extinctions is of critical importance,” said Robert F. C. Naczi, Ph.D., the Arthur J. Cronquist Curator of North American Botany at NYBG and the lead organizer of the

symposium. “Recent publications have revealed how much we know but also how much remains unknown. We owe it to present and future generations to learn more about extinctions and how to slow their pace. This symposium is cause for optimism since leading experts in extinction research will address the crisis and present strategies for abating it.”



Intertidal marsh along the Hudson River near where the extinct Nuttall's Mudflower (*Micranthemum micranthemoides*) once grew.
Photo by Dr. Robert F. C. Naczi

Plants are essential to human existence, yet their extinction has received little comprehensive study and analysis until recently. In August, Dr. Naczi and 15 collaborators published a study in the scientific journal *Conservation Biology* in which they found that 65 species and subspecies of plants have become extinct in the United States and Canada since European settlement. The paper, “[Vascular plant extinction in the continental United States and Canada](#),” is the first comprehensive effort to quantify extinctions

in the flora of North America. Previous, less exhaustive studies found far fewer instances of plant extinction.

The researchers compiled their list of extinct species by consulting plant conservation databases, searching the scientific literature on North American plants, consulting herbarium collections (including the NYBG’s William and Lynda Steere Herbarium), and carrying out fieldwork.

They discovered that most documented plant extinctions have occurred in the western United States, most likely because botanical exploration there predated wide-scale settlement and has allowed for greater detection of extinctions, unlike in the earlier-settled East. Given the paucity of plant surveys in many areas of North America, particularly before settlement, the actual extinction rate is undoubtedly higher than the 65 documented species and subspecies, according to the researchers.

The study noted that 64 percent of extinct plants were known from only a single site or preserved collection. The scientists argue that this finding demonstrates the need to prioritize the conservation of existing single-site plant species. In the course of their research, they compiled data indicating that there are 92 such single-site species currently. “A renewed focus on conserving small sites, as a complement to landscape-level conservation, is needed if the goal is to prevent extinctions,” the study concluded.

The research team was drawn from botanical gardens, universities, U. S. and state governmental agencies, and other plant research institutions from across the country. During NYBG's symposium, which will be moderated by Dr. Naczi, two co-authors of the paper will make presentations, as noted below.

Topics and Speakers:

Tuesday, November 17, 11 a.m.–12:30 p.m.

- Symposium Welcome and Introduction
Thomas E. Lovejoy, Ph.D., NYBG Trustee and University Professor of Environmental Science and Policy, George Mason University
- *Plant Extinctions: How Many, Where, and What Can We Do to Prevent Them?*
Stuart Pimm, Ph.D.; Doris Duke Professor of Conservation, Duke University
- *Global Knowledge of Plant Extinction: What Do We Know? And Should We Trust It?*
Maria S. Vorontsova, Ph.D.; Research Leader (Grasses), Royal Botanic Gardens, Kew; United Kingdom
- *Vascular Plant Extinction in the Continental United States and Canada*
Wesley M. Knapp; Mountains Field Ecologist/Biologist, North Carolina Natural Heritage Program, and lead author of the *Conservation Biology* plant extinction study

Tuesday, November 24, 11 a.m.–12:30 p.m.

- *Medicinal Plant Use in a Biodiversity Hotspot: A Balancing Act*
Nokwanda P. Makunga, Ph.D.; Professor of Medicinal Plant Biology, Stellenbosch University; South Africa
- *Herbaria, Living Collections, and Extinction: Documenting Loss, Providing Reservoirs for the Future*
Matthew C. Pace, Ph.D.; Assistant Curator, William and Lynda Steere Herbarium, The New York Botanical Garden
- *Towards a Comprehensive Strategy for Preventing Plant Extinctions*
Reed F. Noss, Ph.D.; President, Florida Institute for Conservation Science, and a co-author of the *Conservation Biology* plant extinction study
- *The Search for Lost Species*
Barney Long, Ph.D.; Senior Director of Species Conservation, Global Wildlife Conservation

This online symposium is free; to register for access and for more information, go to the symposium's Web page [here](#).

The *Conservation Biology* paper "Vascular plant extinction in the continental United States and Canada" is available at the following link: <https://doi.org/10.1111/cobi.13621>

Support for this Symposium provided by:

My Good Fund Trust
The Andrew W. Mellon Foundation

###

The New York Botanical Garden is a museum of plants, an educational institution, and a scientific research organization. Founded in 1891, the Botanical Garden is one of the world's preeminent centers for studying plants at all levels, from the whole organism down to its DNA. Garden scientists conduct fundamental research on plants and fungi globally, as well as on the many relationships between plants and people. A National Historic Landmark, the Garden's 250-acre site is one of the greatest botanical gardens in the world and the largest in any city in the United States, distinguished by the beauty of its diverse landscape and extensive collections and gardens, as well as by the scope and excellence of its programs in horticulture, education, and plant research and conservation. Learn more: nybg.org

The New York Botanical Garden, 2900 Southern Boulevard, Bronx, New York 10458

The New York Botanical Garden is located on property owned in full by the City of New York, and its operation is made possible in part by public funds provided through the New York City Department of Cultural Affairs. A portion of the Garden's general operating funds is provided by The New York City Council and The New York State Office of Parks, Recreation and Historic Preservation. The Bronx Borough President and Bronx elected representatives in the City Council and State Legislature provide leadership funding.

Media Contact: Stevenson Swanson, sswanson@nybg.org