The Pteridophyte Collections Consortium: 420 million years in 1.7 million specimens

Year 4 update

NSF Awards: 1802504, 1802352, 1802134, 1802033, 1802270, 1802255, 1802239, 1802446, 1802305.
Project overview

GOAL: digitize ~1,700,000 pteridophyte specimens:
~1,600,000 herbarium specimens
~100,000 fossil specimens

36 PCC members: 9 core institutions, 20 sub-awards and 7 data contributors

- UC Berkeley (lead)
- New York Botanical Garden
- University of Michigan

- Field Museum
- Missouri Botanical Garden
- University of Florida

- University of North Carolina
- Yale University
- University of Vermont
What are pteridophytes?
What are pteridophytes?

Equisetum

Lepidodendron

Lycopodium

Osmunda
Total extant specimens digitized:
1,111,639 imaged (67% of goal)
1,095,122 databased (66% of goal)
285,731 specimens geo-referenced (17% of goal)

Total fossil specimens digitized:
35,099 imaged (49% of goal)
32,287 databased (33% of goal)
10,796 records geo-referenced (12% of goal)
Welcome to the data portal for ferns, lycophytes, and their extinct seed-free relatives. Our data portal, the Pteridoportal, is the primary repository and primary data portal for ferns, lycophytes, and their extinct free-sporing relatives and plays a major role in the evolution of land plants. It is especially before the evolution of land plants. Our portal focuses on the evolution of land plants, especially before the evolution of land plants. The Pteridoportal is the primary repository and primary data portal for ferns, lycophytes, and their extinct free-sporing relatives.

Extant specimens:
1,686,778 occurrence records
444,170 (26%) georeferenced
1,386,488 (82%) occurrences imaged

Fossil specimens:
12,828 occurrence records
6,134 (48%) georeferenced
10,328 (81%) occurrences imaged

This portal provides one-stop access to all associated data. Initially these data were from the paleontological collections at the Natural History Museum, Los Angeles County Museum of Natural History, and the University of California, Berkeley. However, in the future we hope to include data from the paleontological collections at all major universities and other institutions worldwide.

For more information about pteridophytes, visit pteridophyte.org and Twitter.
Happy #FossilFriday #FernFriday from @ucmpberkeley! Today we highlight one of Earth's former Carboniferous swamp giants Sigillaria. The stem's "rabbit-track" leaf scars and ribbed surface are dead giveaways for identifying this extinct lycodogenus.
Fall 2021: imaging restarts!
This is it, folks. #FernFriday. The LAST #HERBARIUM #SPECIMEN imaged for the @pterido_TCN at the @MSU_Herbarium. It's a Venezuelan #Phlegmarius collected by Fendler in 1854-1855. These sets also had Charles Wright's Cuban ferns, and Mann & Brigham's Hawaiian ferns.
Increased community engagement

BRIT Armchair Botanist program: https://brit.org/research/herbarium/armchair-botanist/

Chrysler Herbarium at Rutgers University had 72 students participate in their fully remote Herbarium Army internship during the pandemic

Volunteers had more time to contribute to specimen digitization – one volunteer at UC/Jeps transcribed over 7000 records during the pandemic
2021 NSF funded project: **PurSUiT**: Collaborative Research: Accelerating Lineage Discovery to Document Neotropical Fern Diversity

Dr. Alejandra Vasco, Dr. Weston Testo and Dr. Michael Sundue
Thank you!

Contact the UCB team directly or at pteridophytes@berkeley.edu

Or have a look at our:

Portal: pteridoportal.org
Website: pteridophytes.berkeley.edu
Twitter: @pterido_TCN
Facebook: facebook.com/pteridophyteTCN/
Instagram: @pteridophyte_tcn

Taxonomic thesaurus courtesy of Checklist of Ferns and Lycophytes of the World (worldplants.webarchiv.kit.edu/ferns/)