

Our Collections



Algae



Bryophytes



Fungi



Lichens



Vascular Plants

The Duke Herbarium contains more than 825,000 specimens of vascular plants, bryophytes, algae, lichens, and basidiomycete fungi, including more than 2000 types. The collection is especially rich in specimens from the southeastern United States but has synoptic representation worldwide.

Our Curators & Staff

HERBARIUM DIRECTOR: Pryer

ALGAE: Searles (Curator Emeritus)

BRYOPHYTES: Shaw (Curator); Aquero (Coll. Manager; ¾ time)

FUNGI: Vilgalys (Curator); Robertson (Coll. Manager; ½ time)

LICHENS: Lutzoni (Curator); LaGreca (Coll. Manager, full-time)

VASCULAR PLANTS: Windham

(Curator); Manos (Assoc. Curator);

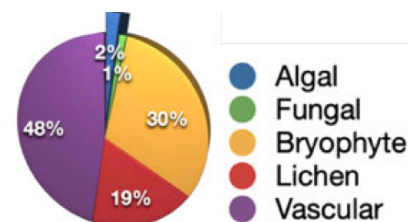
Pryer (Assoc. Curator); Huiet (Coll. Manager; ¾ time)

The Duke Herbarium was closed to visitors during Covid-19 from March 2020-August 2021

Current Collection Holdings

Duke Algal Herbarium:

~20,500 specimens of macro marine algae from the southeastern US, Caribbean, and Mexico, including over 100 types.



L. E. Anderson Bryophyte Herbarium: ~ 260,000

specimens, including over 900 bryophyte types. With about 50,000 collections from the southeastern US.

Duke Fungal Herbarium: ~ 15,000 specimens with

special emphasis on Agaricomycetes. Significant collections from southeastern US, Thailand, Australia.

William Louis & Chicita F. Culberson Lichen Herbarium:

~ 125,000 lichen specimens including 600 types.

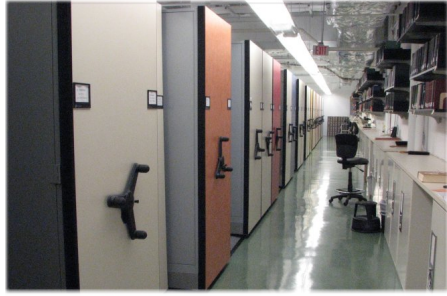
Geographic focus on southeastern US, Iceland, Europe, western Australia, South Korea.

Duke Vascular Plant Herbarium: ~ 408,000 specimens,

including more than 800 types. Especially rich in accessions from the southeastern US, in particular for the Carolinas, and Mesoamerica.

Significance of Collection

The DUKE Herbarium is a collection of preserved plant specimens (irreplaceable physical and temporal records of biodiversity) with associated structural, chemical, molecular, biogeographical, and ecological metadata. It comprises critical DNA vouchers and primary evidence for global change and other human-mediated modifications of the environment. The Herbarium is a "Research Resource" within the Biology Dept. similar to the greenhouse, informatics resources, and microscopy facilities, and supports research activities, classroom activities, and provides identification services.



Databasing & Digitization

In the past 15 years, the DUKE Herbarium has greatly benefited from digitization efforts, spurred by the Advancing Digitization of Biodiversity Collections (ADBC) Program at NSF, in making its specimen data available worldwide (ca. 30% of DUKE's collection is available through online portals, see below). Consequently, our collection is actively expanding into new, important areas of basic research and practical application.

Embedded Weblinks to Online Portals

[ALGAL PORTAL](#)

[BRYOPHYTE PORTAL](#)

[FUNGI PORTAL](#)

[LICHEN PORTAL](#)

VASCULAR PLANT PORTALS:

[SERNEC](#) [SouthEast Regional Network of Expertise and Collections]

[PTERIDOPHYTES](#) [Pteridophyte Collections Consortium (PCC)]

Sponsored Research Funding

New Awards

Digitization TCN: Collaborative Research: Building a global consortium of bryophytes and lichens: keystones of cryptobiotic communities. Pls: Shaw and Lutzoni. Project Dates: 09/15/2020 - 08/31/2023. Award Amount: \$187,210

Continuing Awards

Digitization TCN: Collaborative Research: The Pteridological Collections Consortium: An integrative approach to pteridophyte diversity over the last 420 million years. Pls: Windham and Pryer. Project Dates: 8/1/2018 - 7/31/2022. Award Amount: \$67,231

Past Awards (since 2004)

Digitization TCN: Collaborative Research: The Key to the Cabinets: Building and Sustaining a Research Database for a Global Biodiversity Hotspot Pls: Weakley (UNC) and Windham (Duke), Project Dates: 08/15/2014 - 7/31/2019. Award Amount: \$343,596

Digitization TCN: Collaborative Research: The Macroalgal Herbarium Consortium: Accessing 150 Years of Specimen Data to Understand Changes in the Marine/Aquatic Environment. Pls: Weakley (UNC) and Pryer. Project Dates: 08/01/2013 - 07/31/2018; Award Amount: \$138,696

Digitization TCN: Collaborative Research: The Macrofungi Collection Consortium: Unlocking a Biodiversity Resource for Understanding Biotic Interactions, Nutrient Cycling and Human Affairs. Pls: Cubeta (NC State) and Vilgalys. Project Dates: 04/18/2012 - 05/23/2014. Award Amount: \$237,681.

Digitization TCN: Collaborative Research: North American Lichens and Bryophytes: Sensitive Indicators of Environmental Quality and Change. Pls: Lutzoni and Shaw. Project Dates: 07/01/2011 - 06/30/2016. Award Amount: \$292,066

A Plan to Rehouse and Reorganize the Vascular Plant Herbarium and Botanical Library at Duke University (DUKE). Pls: Pryer and Windham. Project Dates: 06/01/2007 - 05/31/2011. Award Amount: \$467,691

Databasing Bryophytes from the Southeastern U.S. in the Duke University Herbarium. Pl: Shaw. Project Date: 02/15/2005 - 01/31/2010. Award Amount: \$412,012

Digitizing and Databasing of the La Selva Flora. Pl: Stone. Project Date: 08/01/2004 - 07/31/2008. Award Amount: \$389,949

Specimen Loan Activity

Sharing data conserved in the Duke Herbarium has been central to our mission since its foundation 100 years ago. Researchers obtain specimen data by visiting the herbarium or through specimen loans (or through our online portals, as available). Herbarium loans to DUKE are initiated at the request of a Duke researcher. In addition, outside researchers from herbaria around the world regularly request herbarium specimen loans from Duke. Herbarium collection managers (analogous to librarians working for a library) carry out these activities.

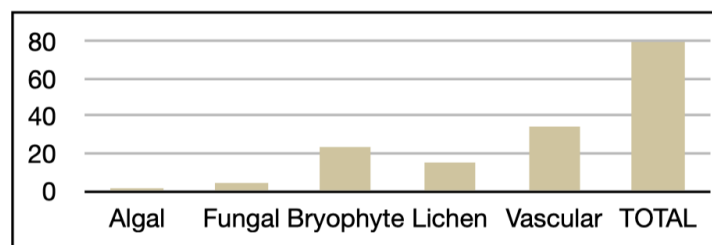
A typical annual summary of loan activity in the Duke Herbarium

	Algal	Fungal	Bryos	Lichen	Vascular	TOTAL
Collection size	20500	15000	260000	125000	408000	828500
Loans *to* Duke (specimen total)	0	12	46	23	94	175
Loans *from* Duke (specimen total)	5	2	35	13	10	65
	17	34	2639	964	536	4190

Publications that Cite the DUKE Collection

The steady flow of loans into and out of the Duke Herbarium results in an average of 80 peer-reviewed publications that cite the DUKE collection annually (cf. [Google Scholar](#)). This helps ensure the global relevance of the collection for a wide spectrum of research needs.

A typical annual summary of publication numbers that cite the DUKE Herbarium



Outreach and public scholarship

Most herbarium collections staff are involved in the pursuit of outreach activities, locally, nationally and globally, see [herbarium website](#) for details.

Statement of diversity, inclusion, and belonging

The DUKE University Herbarium community denounces all forms of racism, harassment, and discrimination. We recognize the painful legacy of prejudice in which marginalized groups, especially scientists of color, who work across plant biology and academia have been made to feel unwelcome. With our colleagues across Duke and in the

botanical science and natural history communities, we stand ready to confront systematic racism and are committed to creating an inclusive and welcoming community.