

Large and Small Collections: *Partners in a Time of Challenges and Opportunities*



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Definitions and Characterizations of U. S. Collections

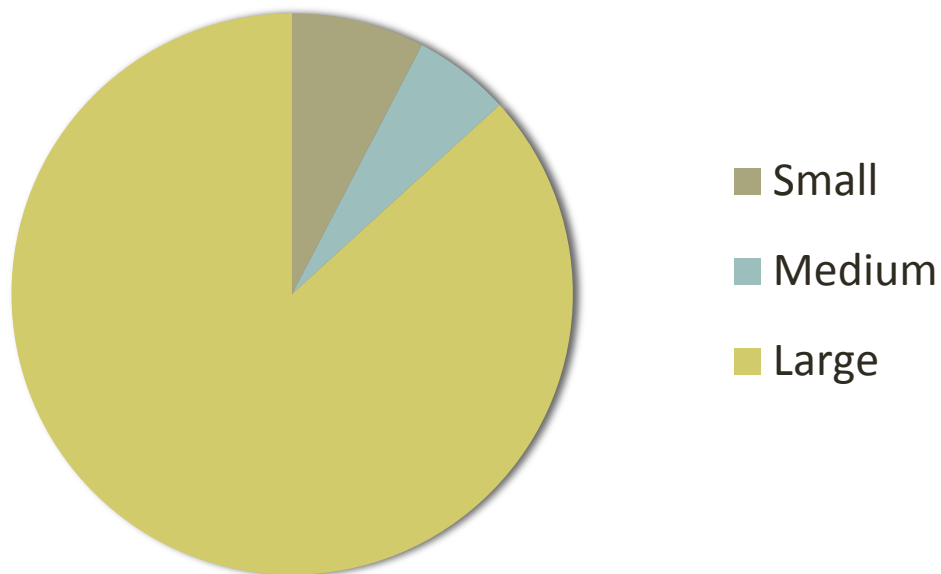
Based on Data from Index Herbariorum, May 2015

Index Herbariorum Part I: The Herbaria of the World



Definitions and Characterizations: *Herbarium Specimens in US Collections*

Distribution of U.S. Specimens Across U.S. Institutions



Herbarium Size Class	Number of Specimens	%% of Total
Small	5573284	7.7
Medium	4077081	5.5
Large	63248221	86.8
	72898586	

Definitions and Characterizations

Size Classes and Age

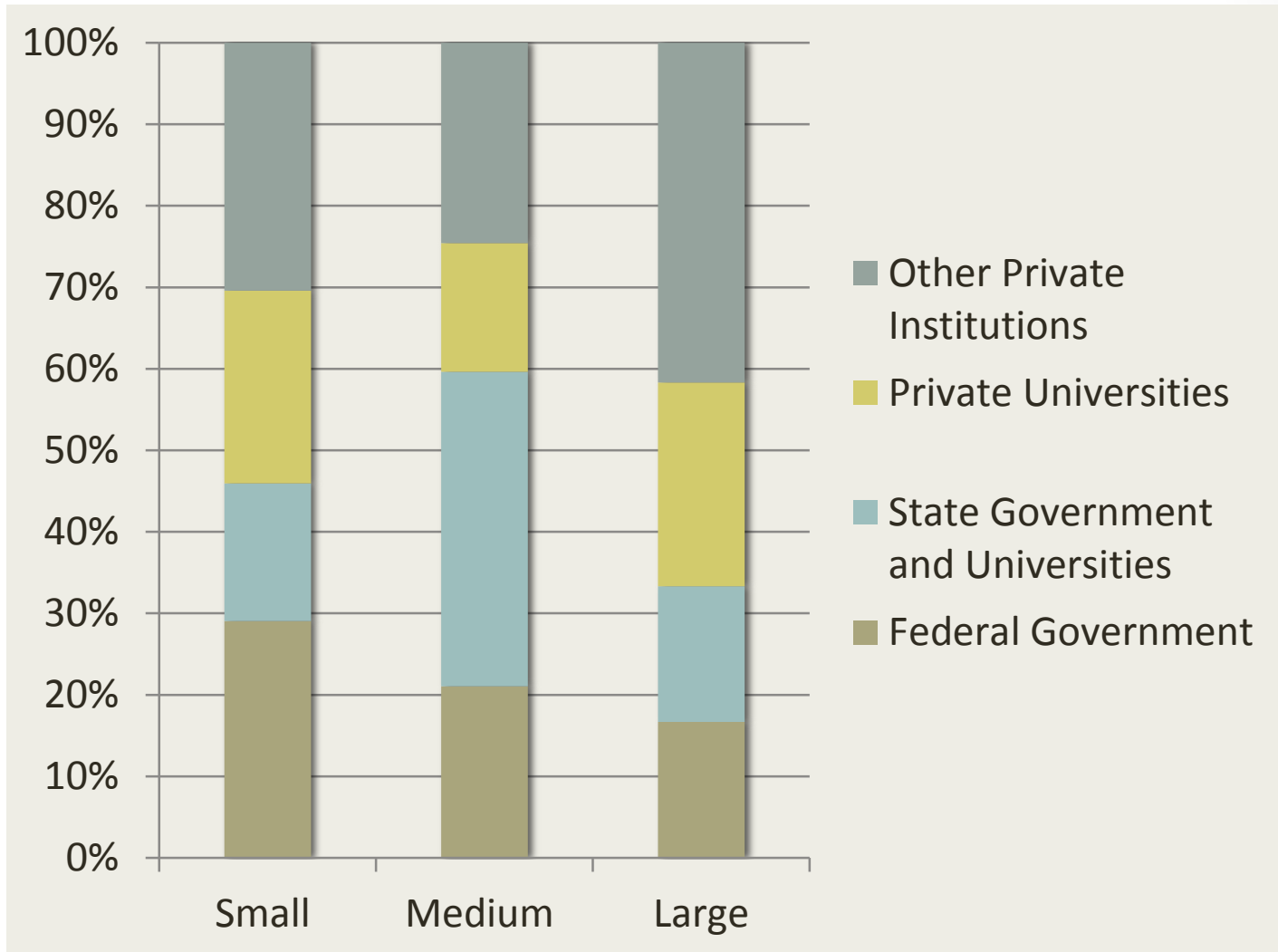
Type	Large	Medium	Small
Size Range	100,000 and larger	50,000-99,999	49,999 and smaller
# Herbaria	101 ¹	58	429 ²
Average age	1897	1934	1946

¹ Very large (more than 500,000 specimens): 32

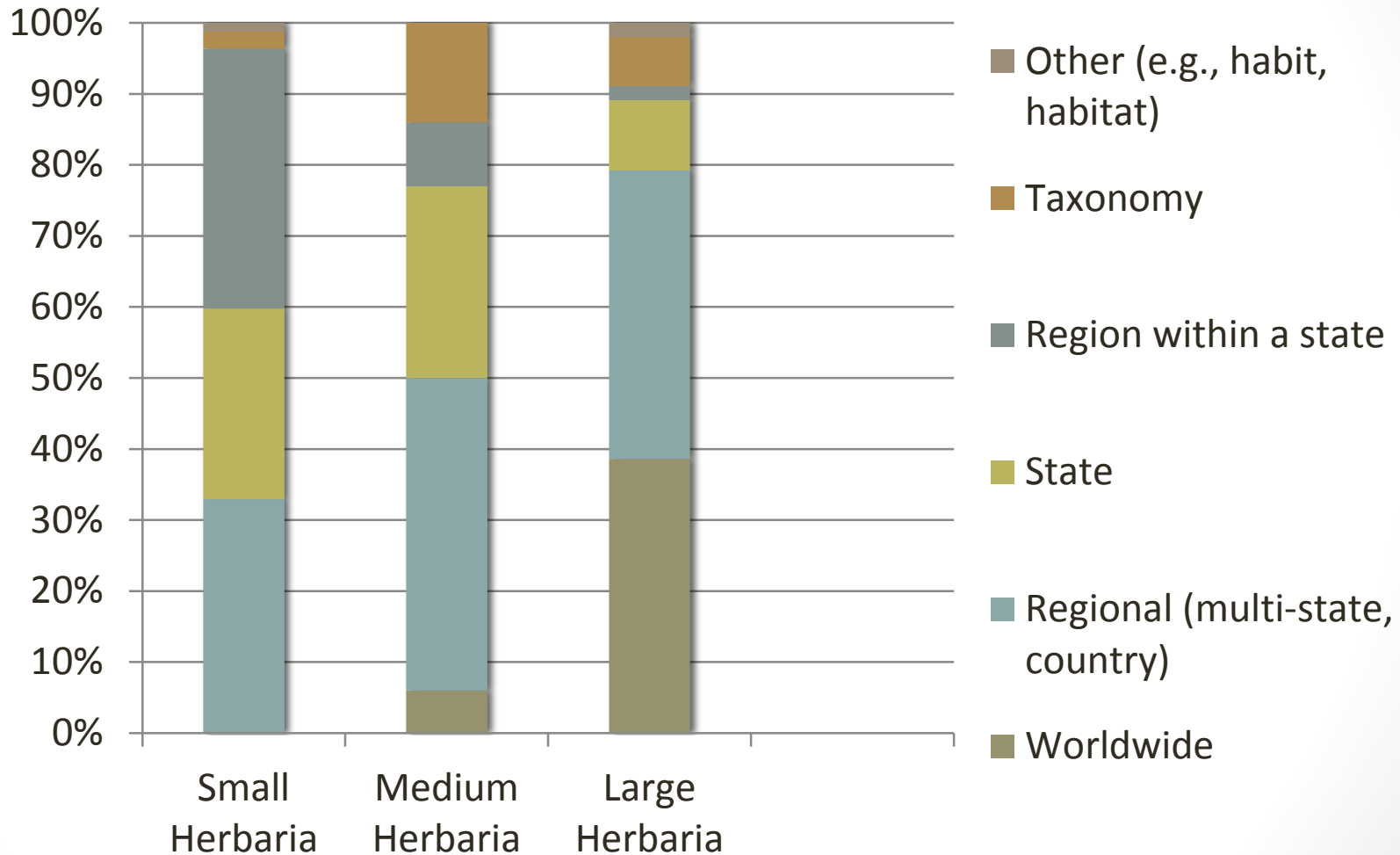
² Very small (fewer than 20,000 specimens): 211

Definitions and Characterizations

Affiliations of Herbarium Size Classes

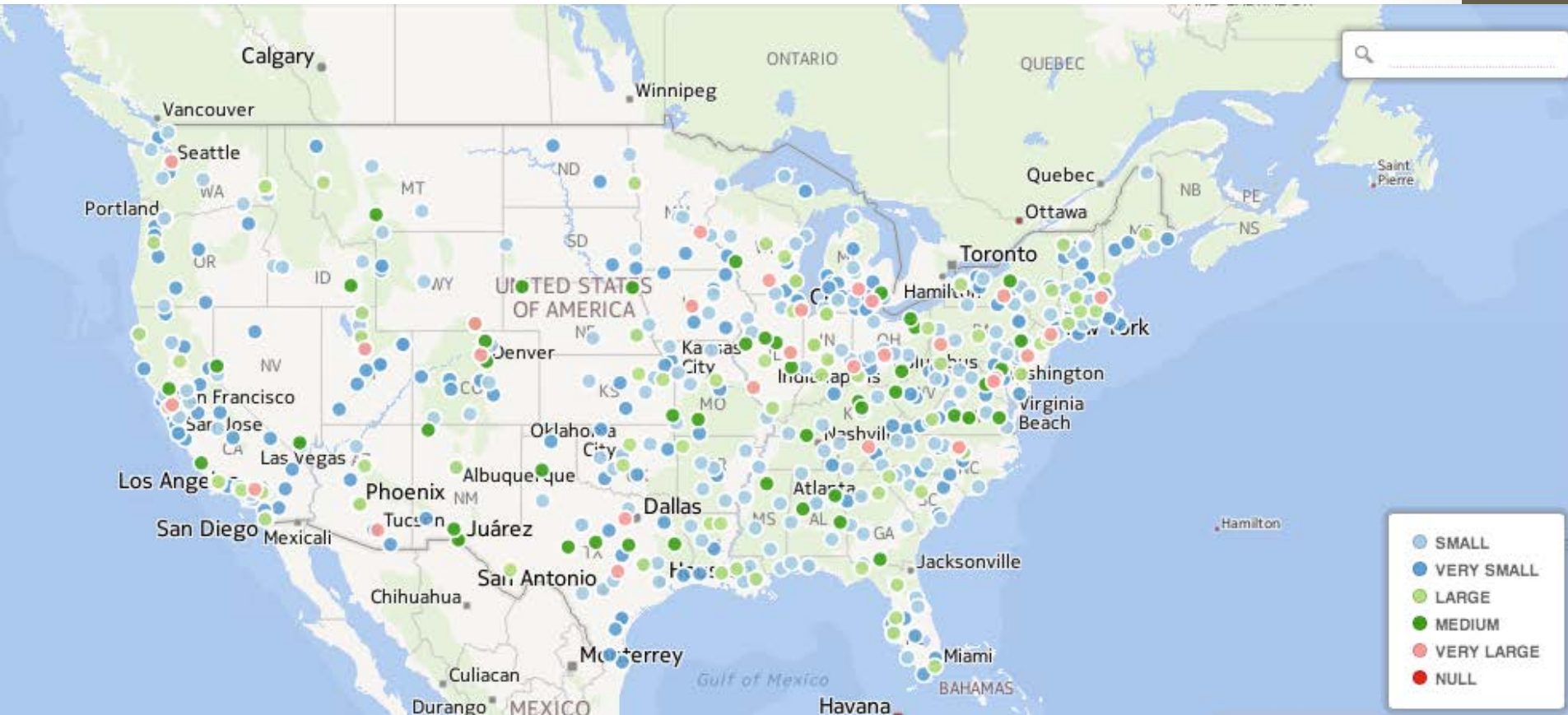


Collection Focus



Definitions and Characterizations

Geographical Distribution



Problems Facing Small and Large U.S. Herbaria

Small Collections

- Collections in need of physical support; collection space crowded, deficient in other respects
- No or very few dedicated staff
- Insufficient budget
- Little recognition or support from administration

Large Collections

- Collections in need of physical support; collection space crowded, deficient in other respects
- Dedicated staff, but usually insufficient
- Insufficient budget
- Recognition, but likely an inadequate understanding of the collections needs.

Collaborations Among Collections: Organizations

North American Network of Small Herbaria



**BIODIVERSITY
COLLECTIONS
NETWORK**



SPNHC
ADVANCING COLLECTIONS CARE



American
Society of
Mammalogists

Natural History
Museum Leaders
Group

Society of Herbarium Curators

Uniting Herbaria Across the Nation and Around the World

Collaborations Among Collections: Geographically-Based Networks



Advancing Digitization of Biodiversity Collections



The Macrofungi Collections Consortium

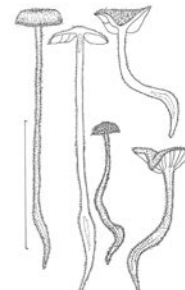
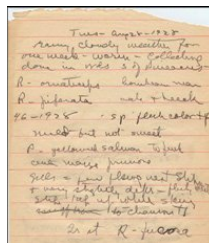
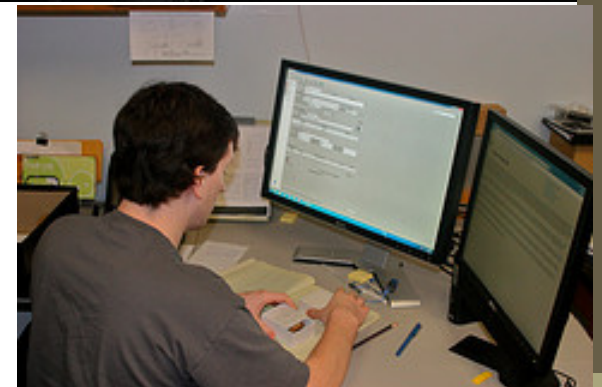
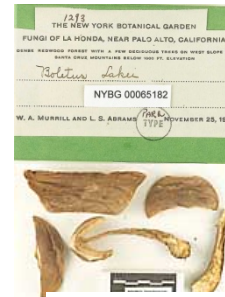
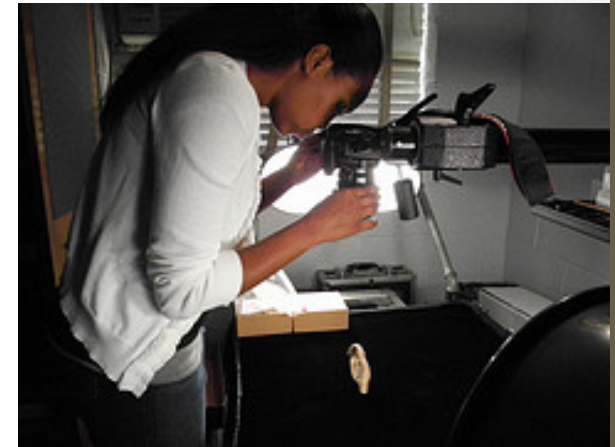
- Consists of 35 institutions in 24 states:
 - Thirty one large and small universities (20 large, 10 small and medium; smallest has about 1000 specimens)
 - Two botanical gardens
 - Two natural history museums
 - One federal collection (Beltsville)



Digitize Specimen Data, Fieldnotes, Photographs

Data to be digitized:

- 700,000 specimen records (combined with 600,000 previously digitized specimens for a total of 1.3 million)
- 70,000 specimen images
- 144,260 photographs of living fungi (represented in specimen collections)
- 26,092 fieldbook pages
- 355,220 field notes, spore prints



Large and Small Collections

Specifics of a Collaboration: MaCC Project

- Three day training course, either at NYBG or home institution
- Imaging equipment for all institutions
- Opportunities for students, labor and training
- Funds for travel to a scientific meeting every year
- Helpdesk function
- Comprehensive user manual

Large and Small Collections

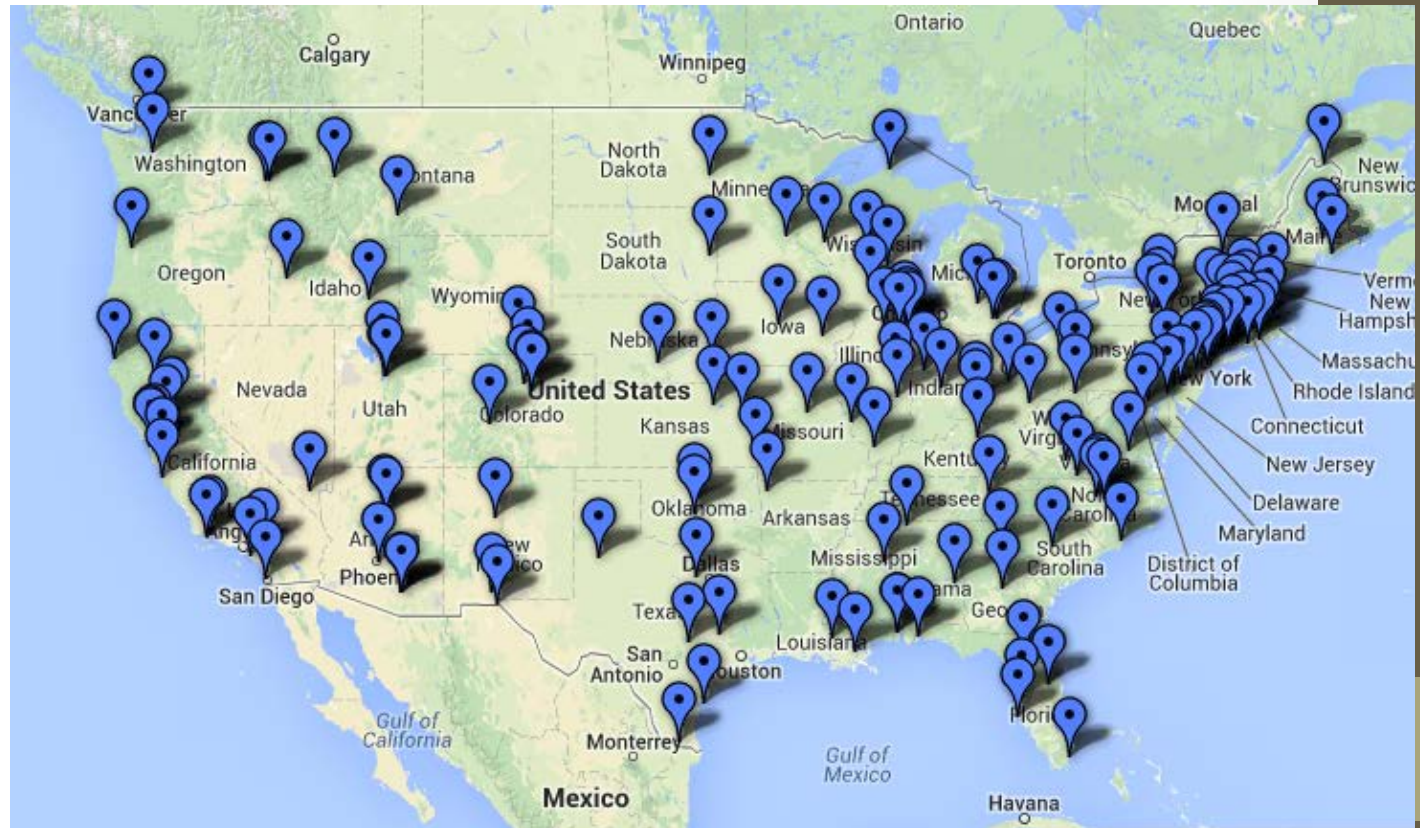
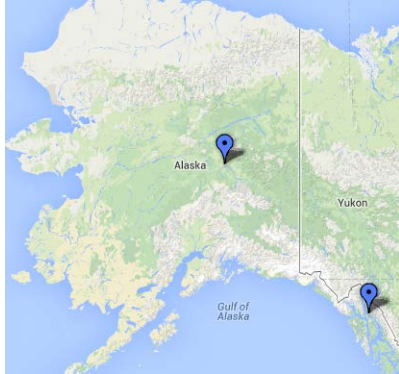
Specifics of a Collaboration: MaCC Project

What the small collections bring to the collaboration

- Enthusiasm and focus
- Little-known, unique collections
- Broader impacts, geographic diversity
- Capacity building for the nationwide collections community

Large and Small Collections

Thematic Collections Network



Getting the Most from ADBC for Small Collections

How to increase participation by small institutions in the next 6 years:

- Take the lead on a proposal or join as a PEN
- Make your interest in participating in a project known – reach out to the large institutions with similar content
- Make sure people know how to reach you
 - Update registry information
 - “Match.com” –name and contact info, collection strengths, what they can offer with regard to broader impacts

Other Collaborations

Standard protocol for recording/modifications made to collections data for research projects

Collections Metadata – an inventory of the types of collections held in the U.S. based on taxonomy, geography, age/date, collector or expedition

Identify biodiversity knowledge gaps

Thanks



Flora of MARYLAND, U.S.A.
EASTERN SHORE
Determined by *John R. Howell, Jr.*
CAROLINE COUNTY: Forest of Edgewater, 1/4 mile
W of the entrance to the Chesapeake Bay, 1/4 mile
W of the shore of the Chesapeake Bay.
38° 41' 13" N, 77° 48' 11" W
28 August 1971

NEW YORK
BOTANICAL
GARDEN

Gill Sans Wright Longbottom
Printer, Montreal