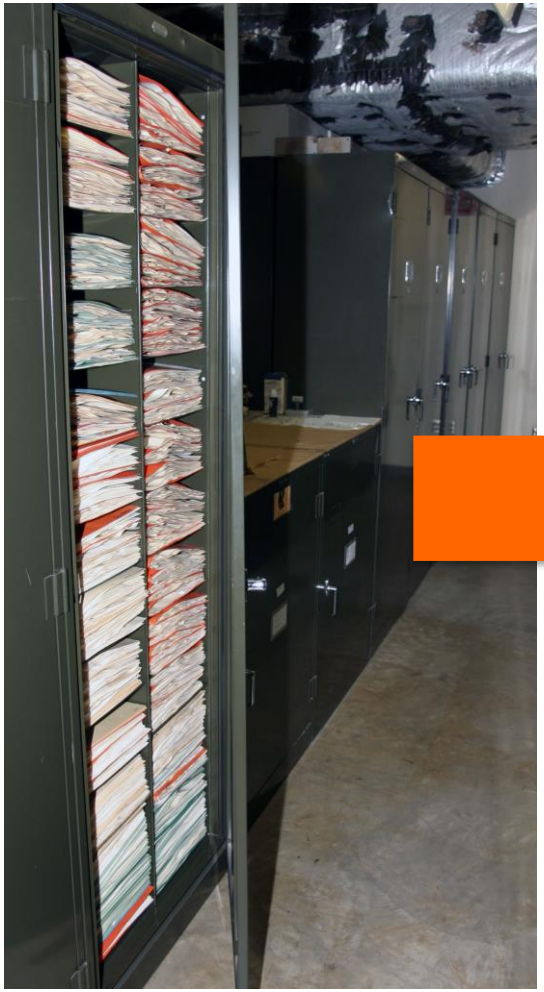
WeDigFLPlants—Innovative, place-based citizen science engagement to deepen public understanding of biodiversity data archives

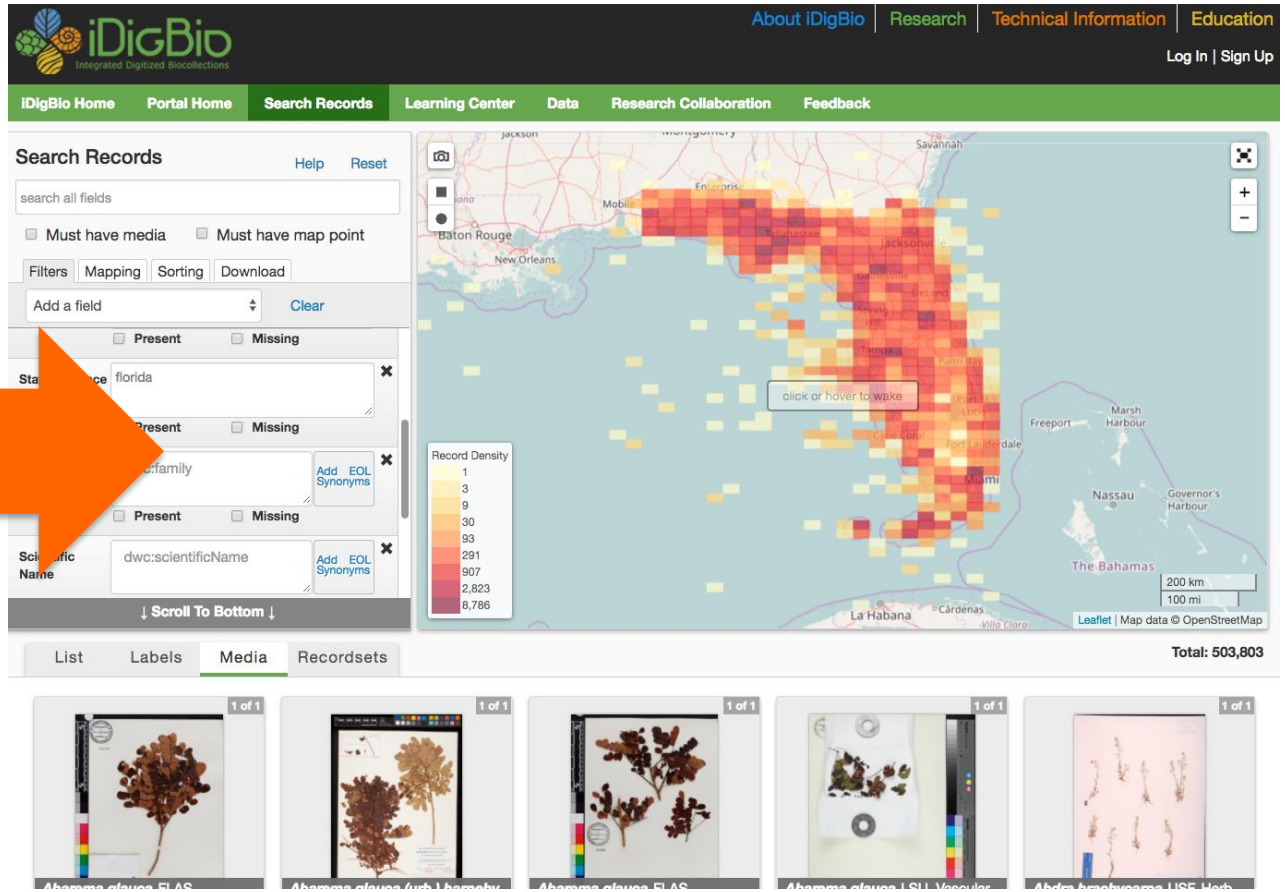
Austin Mast

Professor, Biological Science, Florida State University

Director, FSU's Robert K. Godfrey Herbarium

The Science Challenge

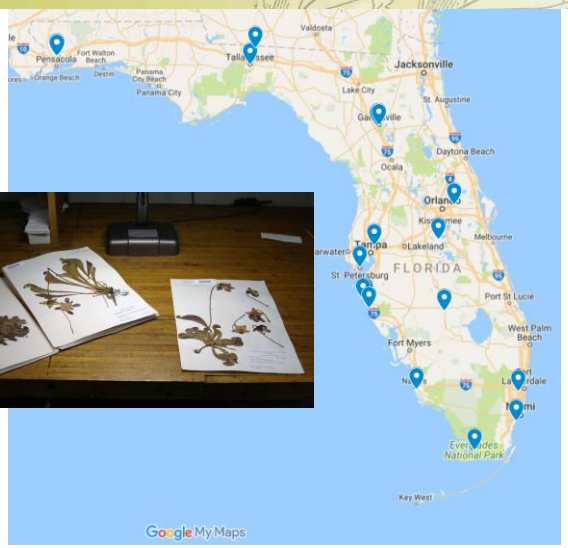




Complete the historical baseline

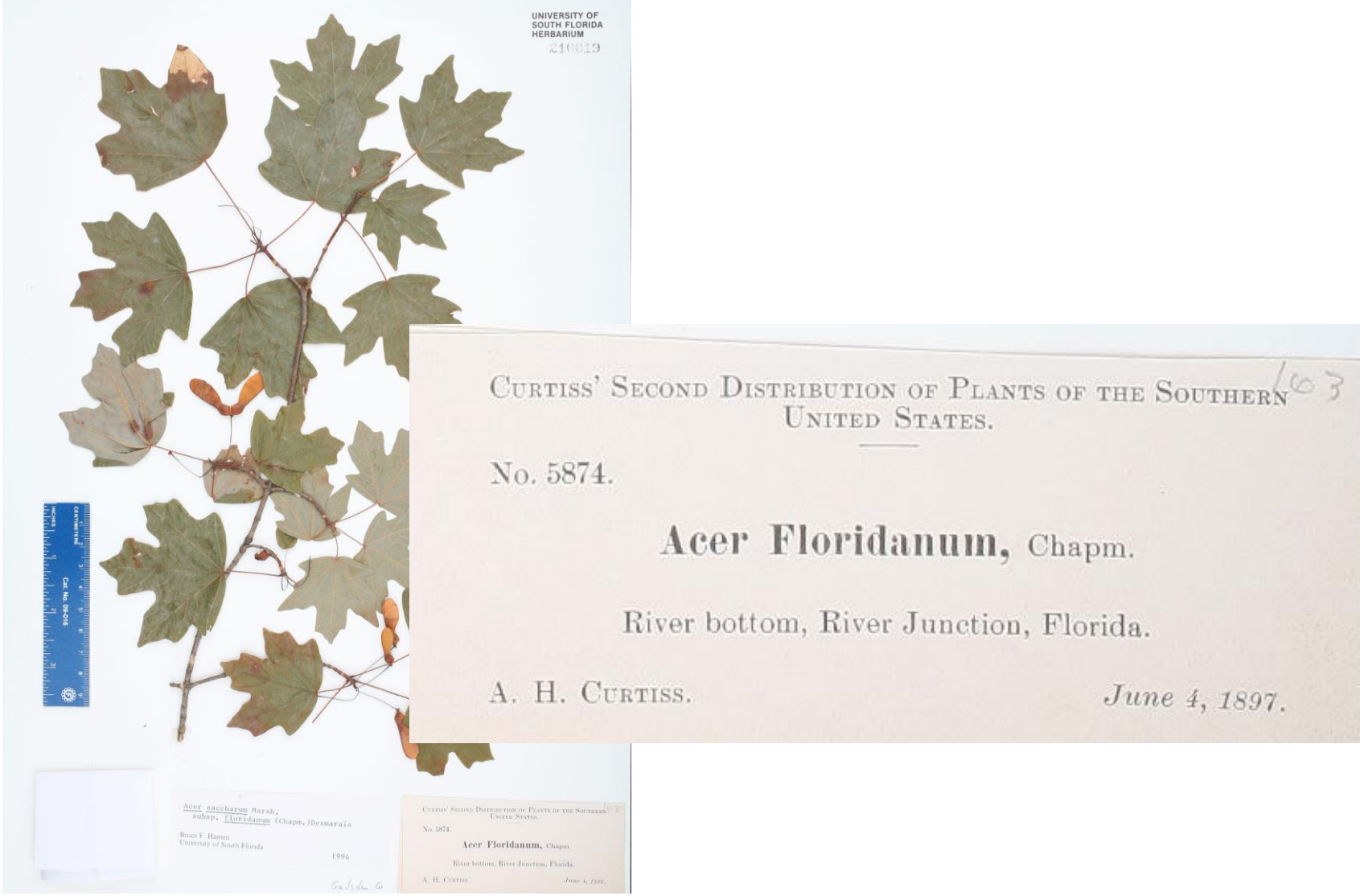
SERNEC

Southeast Regional Network of Expertise and Collections



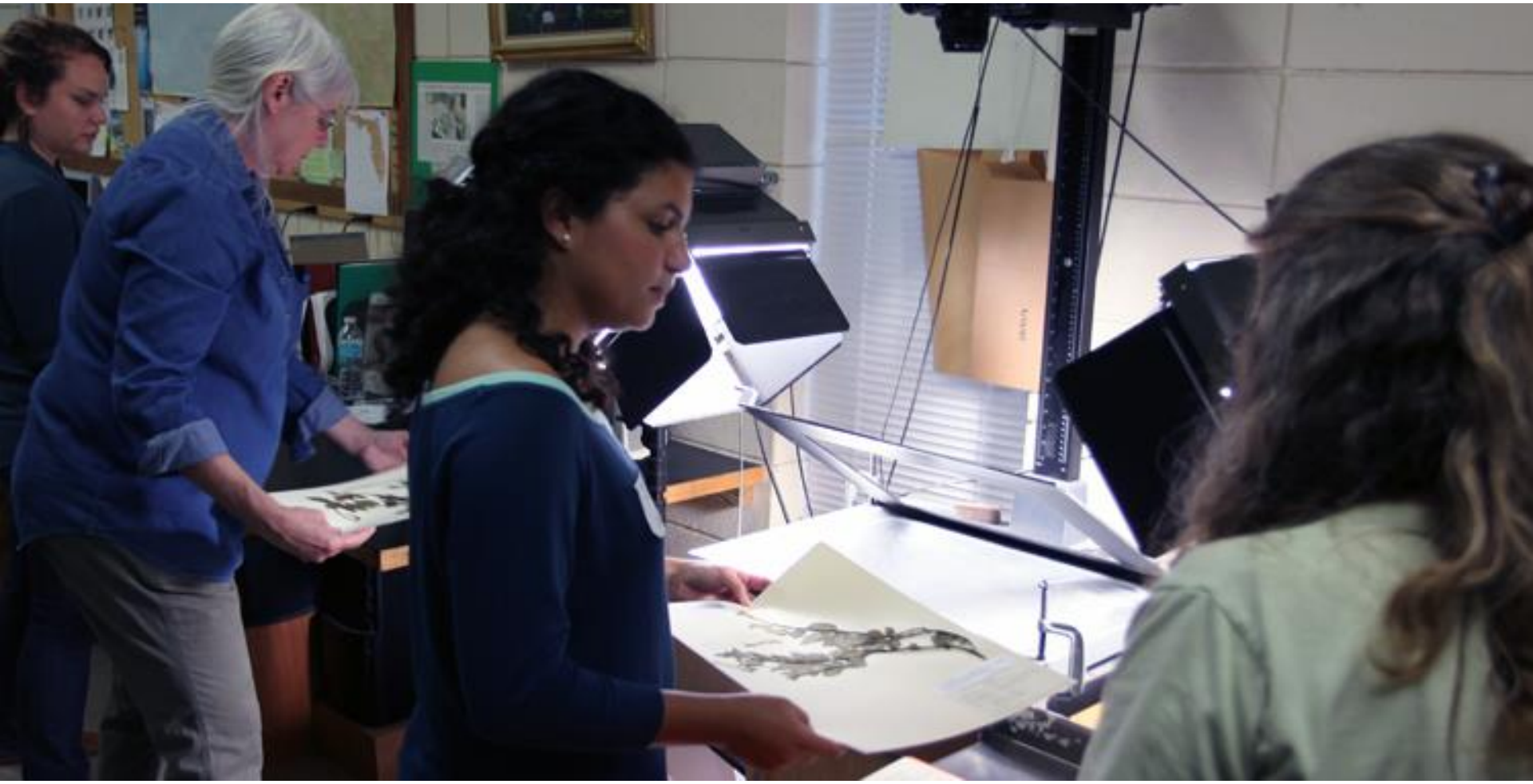
Current & Prospective Science Partners

The E&O Opportunity



Leverage the easily understood, deeply historical plant collecting process,

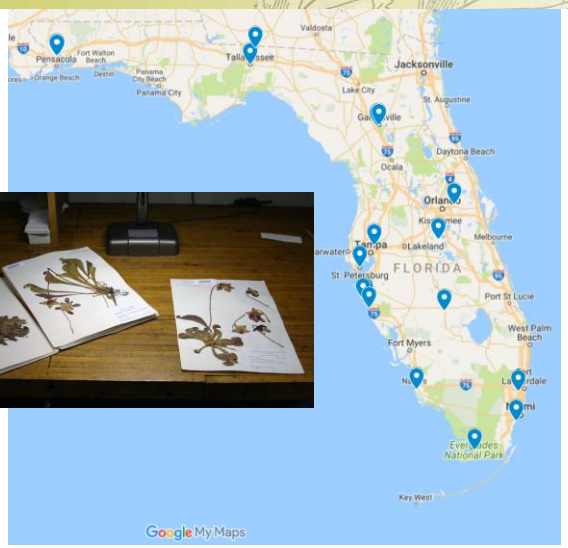
Leverage the easily understood, deeply historical plant collecting process, the visually compelling, data-laden specimens,



Leverage the easily understood, deeply historical plant collecting process, the visually compelling, data-laden specimens, and the straightforward specimen digitization activities to engage Florida residents and others in activities that further plant research, management, and conservation and their understanding of those science activities.

SERNEC

Southeast Regional Network of Expertise and Collections



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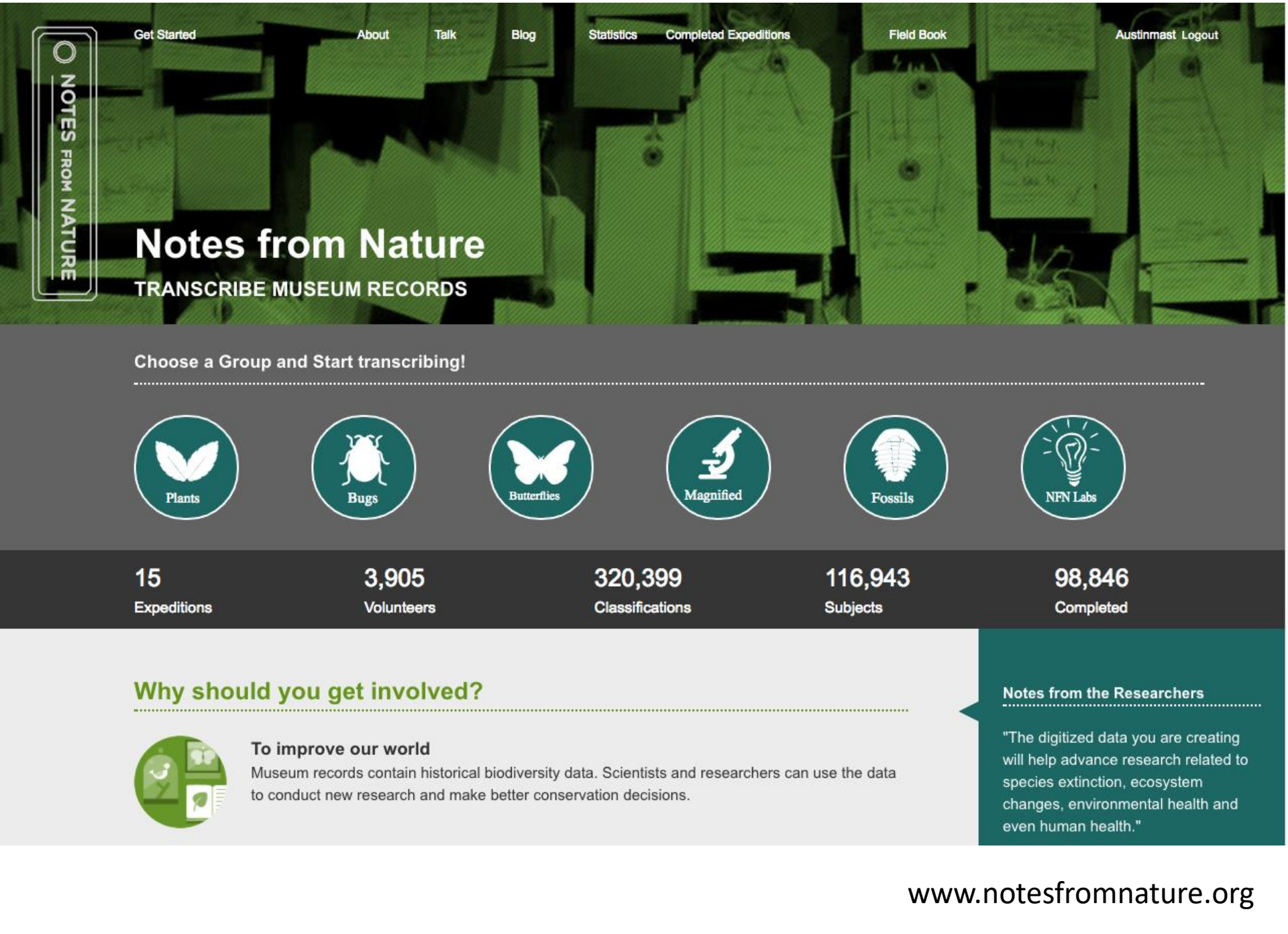
The Enabling Cyberinfrastructure



www.notesfromnature.org

Herbaria

COMPLETED EXPEDITIONS FOR HERBARIA

Arkansas Dendrology: Part I: Gymnosperms -- 16 September 2016
Completed: August 7 2017
231 subjects in 332 days

Primulaceae of the World: More than Primroses and Cowslips
Completed: July 20 2017
3092 subjects in 276 days

Herbaceous Plants of the Ouachita Mountains
Completed: July 3 2017
3934 subjects in 284 days

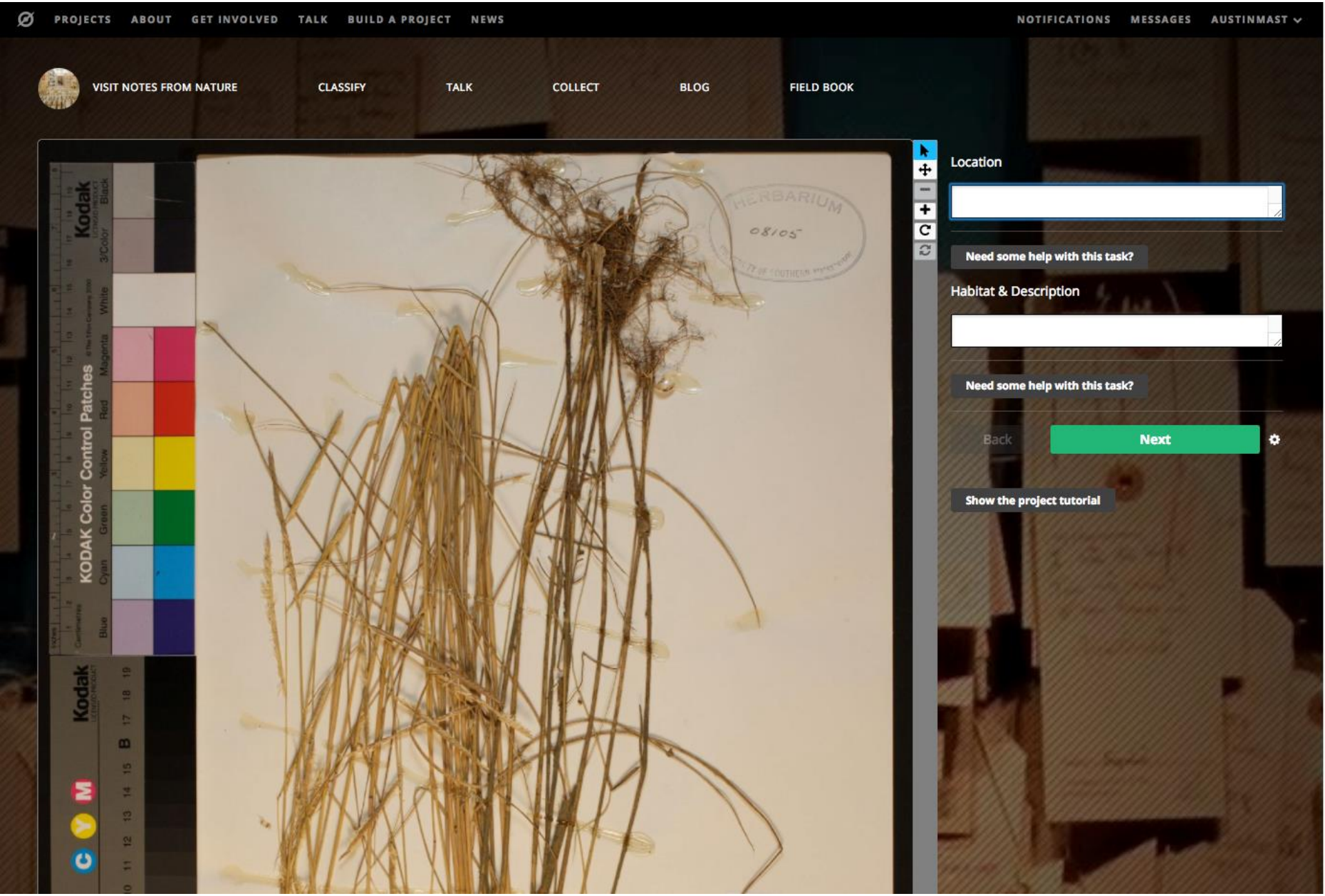
Host Plants of Virginia I
Completed: June 23 2017
4469 subjects in 148 days

Amaranthaceae: Cosmopolitan Allrounder
Completed: June 18 2017

WeDigFLPlants' Spring-flowering Shrubs and Trees from the Florida Panhandle

WeDigFLPlants' Blueberries of the Florida Peninsula
Completed: June 14 2017

Plants have all the anthers! Pt1
Completed: June 2 2017



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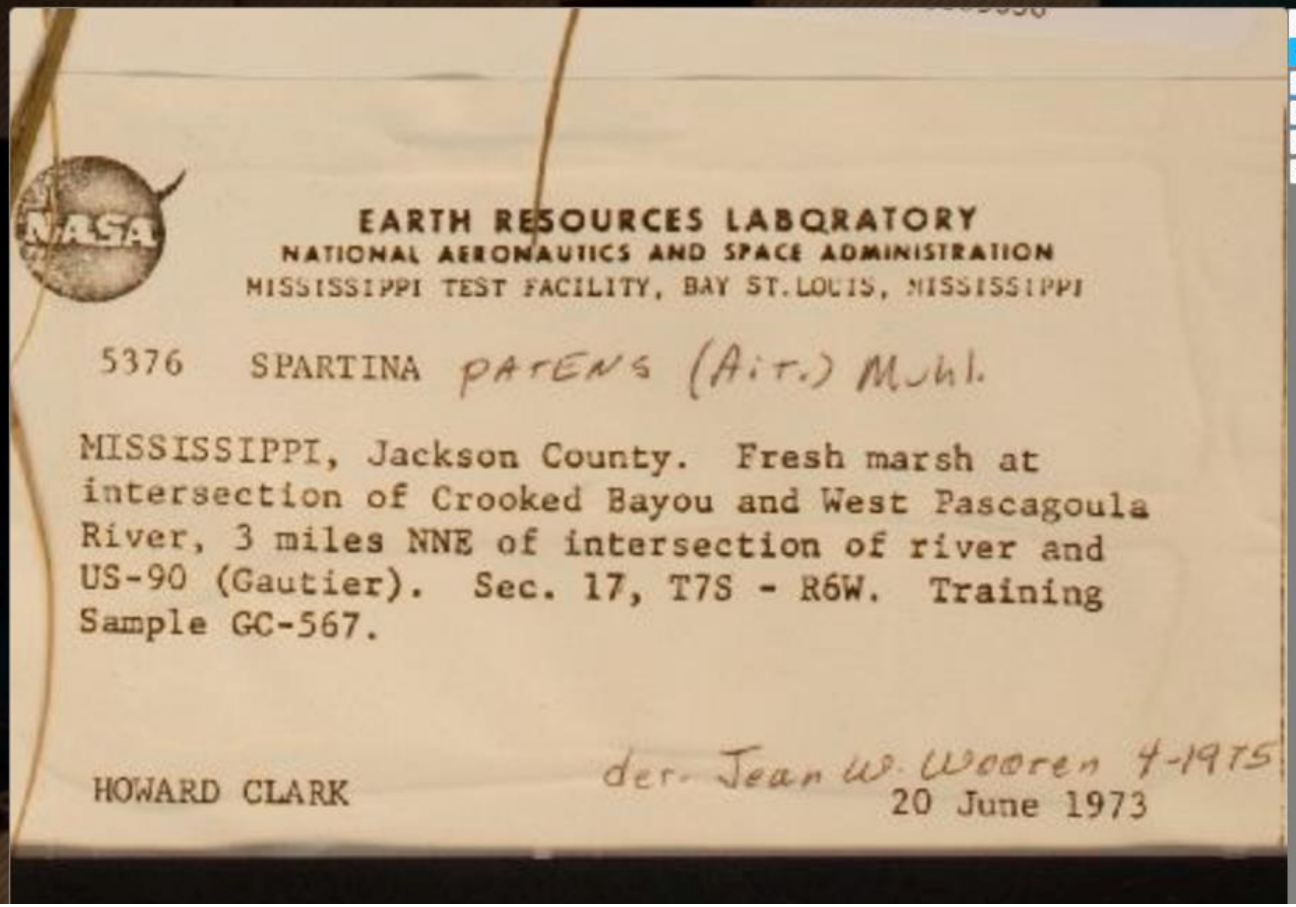
VISIT NOTES FROM NATURE CLASSIFY TALK COLLECT BLOG FIELD BOOK



Location

Need some help with this task?

Habitat & Description

Need some help with this task?

Back Next

Show the project tutorial

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WeDigFLPlants

Build the historical baseline for plant diversity and distribution in Florida.

WeDigFLPlants is a collaboration between professional research botanists, amateur naturalists, gardeners, educators, and citizen scientists to build the most complete picture possible of plant distribution and diversity in Florida over the past 200 years. The data for this historical baseline come from archived plant specimens curated by the world's 3,000 herbaria. Each of these specimens includes a label that answers the who, what, when, and where of the collecting event that produced it. Transcribing that label data into digital form and providing that data online at aggregators like idigbio.org and gbif.org makes it available to scientists, educators, natural resource managers, and policymakers addressing societal challenges today and in the future. Today, there are >4,700 species of plants native or naturalized in Florida. WeDigFLPlants is an inaugural interest group associated with the annual Worldwide Engagement for Digitizing Biocollections (WeDigBio) Event.

How to Participate

This project has the following active expeditions:

Organization
WeDigBio
Contact
Austin Mast
Contact Title
Chief Mobilizer
Organization Website
http://wedigbio.org
Project Partners
Florida Native Plant Society, The Southeastern Regional Network of Expertise and Collections, The Worldwide Engagement for Digitizing Biocollections (WeDigBio) Event, and iDigBio, the US National Resource for Advancing Digitization of Biodiversity Collections.
Funding Source
National Science Foundation under Cooperative Agreement EF-111520 and awards 1458550 and 1410288. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National

https://biospex.org/project/wedigflplants

How to Participate

This project has the following active expeditions:

Expeditions	% Complete	Join In
WeDigFLPlants' Mints of Florida—More than Mojitos	100.00%	Notes From Nature V2
WeDigFLPlants' Laurels of Florida—Fight Laurel Wilt	100.00%	Notes From Nature V2
WeDigFLPlants' St. John's Worts of Florida—Diversity to Lift your Spirits	100.00%	Notes From Nature V2
WeDigFLPlants' Rose Gentians of Florida—Beauty from the Center of its Diversity	100.00%	Notes From Nature V2
WeDigFLPlants' Sunflowers of Florida—Florida's Biggest Plant Family	100.00%	Notes From Nature V2
WeDigFLPlants' Milkweeds of Florida—Monarch Butterfly Food Plants	100.00%	Notes From Nature V2
WeDigFLPlants' Legumes of Florida—Nitrogen-Fixers of the Peninsula	100.00%	Notes From Nature V2
Fall Flowers of Alachua County, Florida	100.00%	Notes From Nature V2
WeDigFLPlants' Euphorbs of Florida—Rubber Relatives of the Panhandle	98.62%	Notes From Nature V2
WeDigFLPlants' Dogwoods and Tupelos of the Florida Panhandle	100.00%	Notes From Nature V2
WeDigFLPlants' Spring-flowering Shrubs and Trees from the		Notes From

Funding Source
National Science Foundation under Cooperative Agreement EF-111520 and awards 1458550 and 1410288. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Incentives
Contact Austin Mast for a thank-you WeDigFLPlants sticker (after 50 transcriptions) or WeDigFLPlants hat (after 200 transcriptions). Local WeDigFLPlants event organizers should contact Austin Mast to receive WeDigFLPlants stickers to hand out to participants at their event.

Geographic Scope
Florida, U.S.A.

Taxonomic Scope
Plants

Temporal Scope
1800–present

Language Skills Required
English and perhaps occasionally Spanish

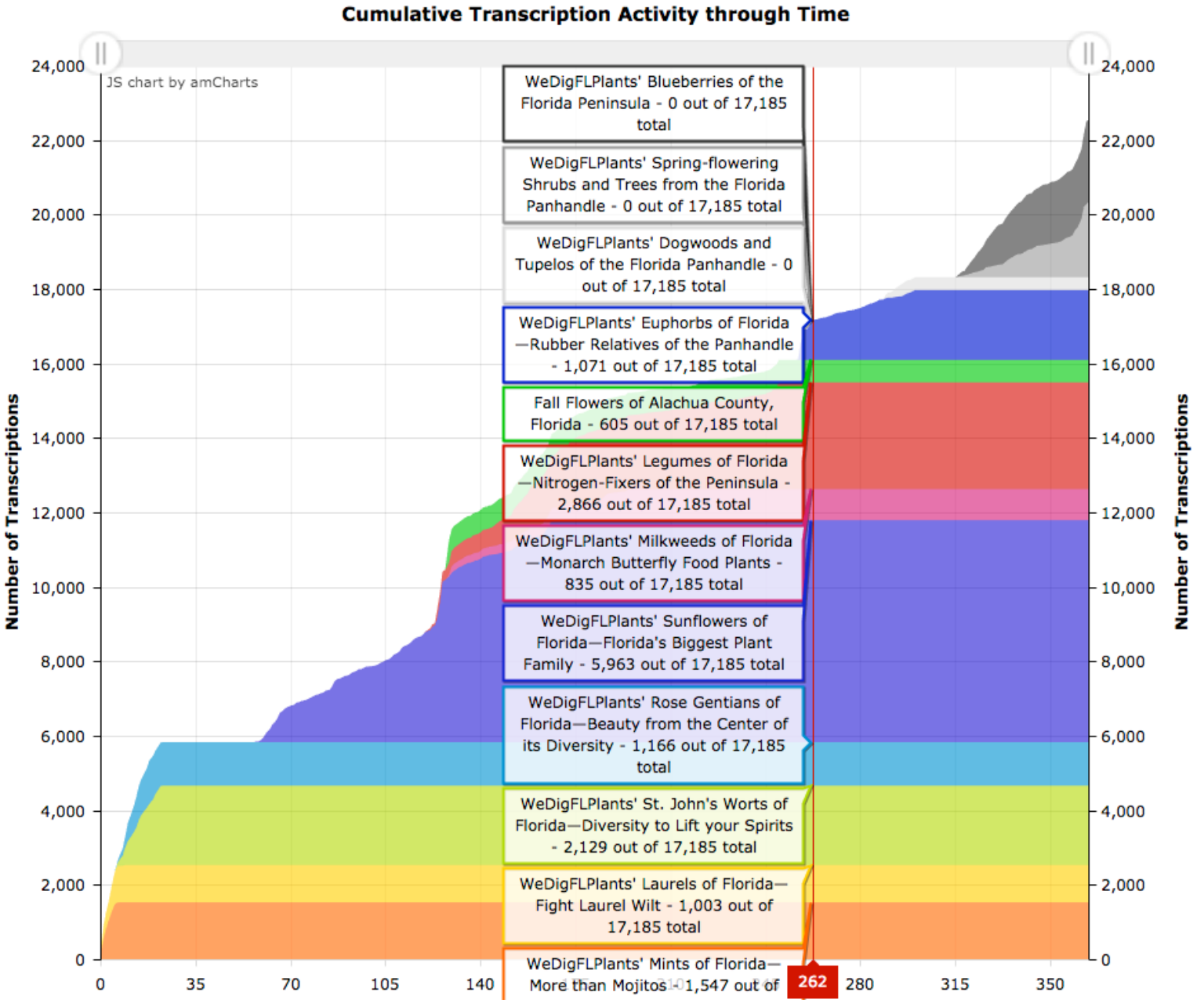
Activities
Online transcription of herbarium specimen labels at Notes from Nature (notesfromnature.org)

Keywords
Florida, Plants, Biodiversity, Transcription

Twitter
https://twitter.com/wedigflplants

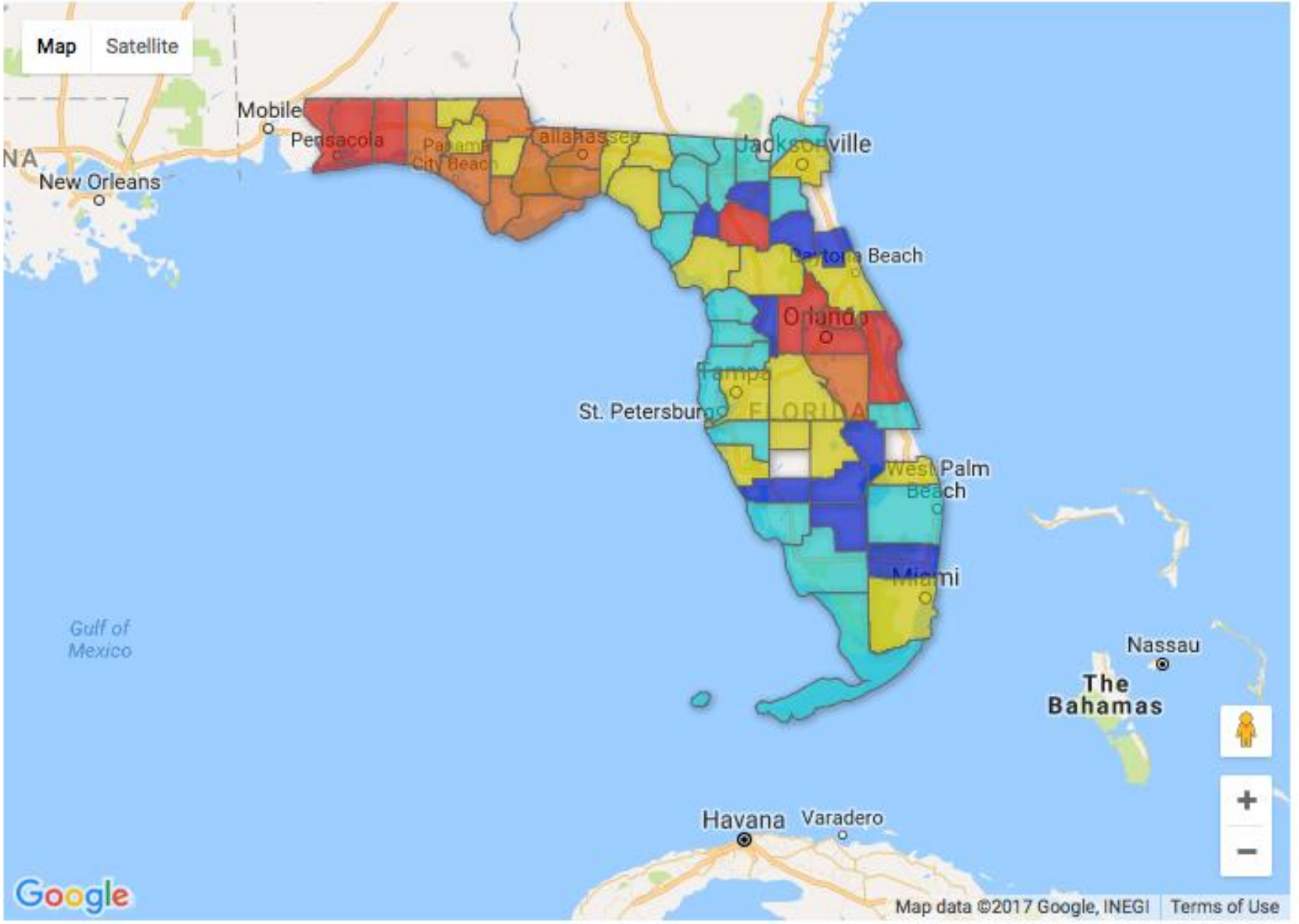
Project Resources
Help Behind-the-Scenes at a Museum as a Citizen Scientist
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/171734
WeDigFLPlants Sticker and Hat

https://biospex.org/project/wedigflplants



https://biospex.org/project/wedigflplants

Heat Map of Collection Location of Transcribed Specimens



https://biospex.org/project/wedigflplants

BIOSPEX Groups Projects Expeditions Processes Our Vision FAQ Resources Contact Team Admin amast@bio.fsu.edu

Projects / WeDigFLPlants / WeDigFLPlants

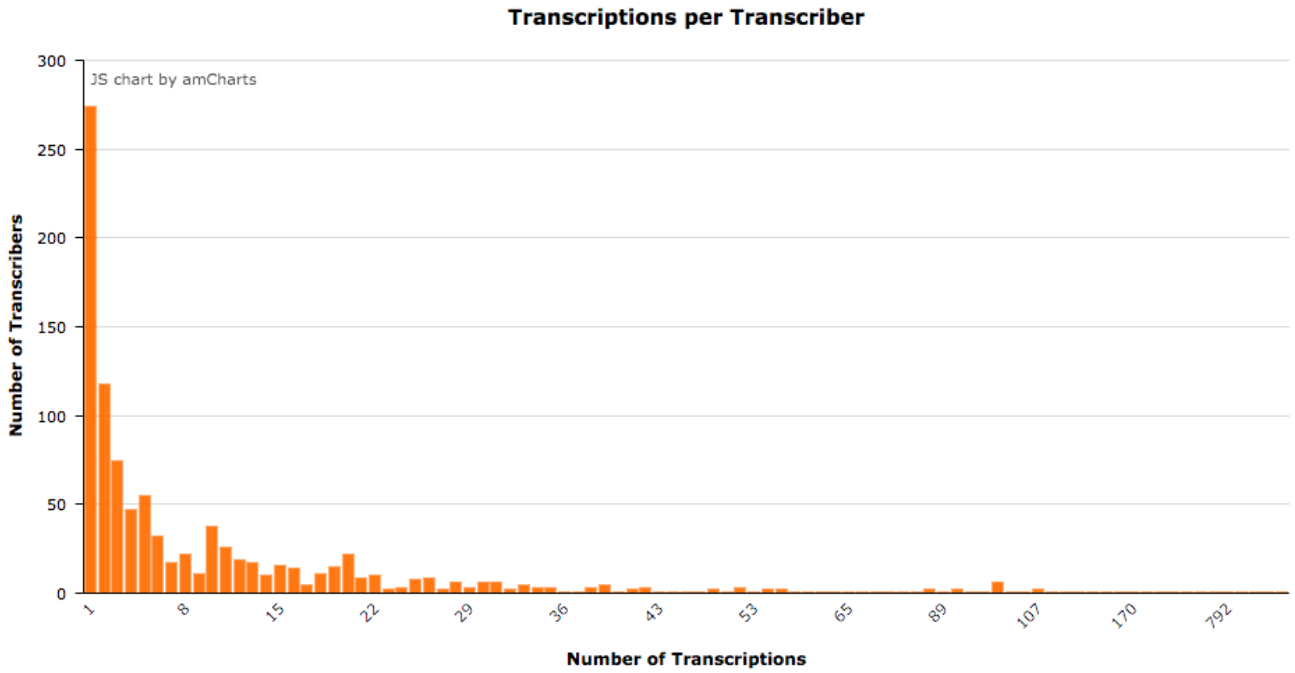
WeDigFLPlants

Build the historical baseline for plant diversity and distribution in Florida.

+ Import | Explore | Clone | Edit | Delete | Reprocess Ocr | Advertise | Statistics | Project Url : WeDigFLPlants

Transcriber Summary

am.zooni	2955
WimTemmerman	2503
Heikal	1116
PVerbeeck	916
snowysky	792
Viticulum	633
Mr._Kevvy	536
maggiej	529
JFK73	454
QuantumSpaceGoat	447
tinkapuppy	387
Aggie92	170
sedgequeen	164
JasmineR171	143
Audburrito	135
reddder	134
Caeden	126
Kathy.0101	118



554 logged-in transcribers to-date with a median of 5 transcriptions (range=1–2955); 26 transcribers have contributed 100+ transcriptions.

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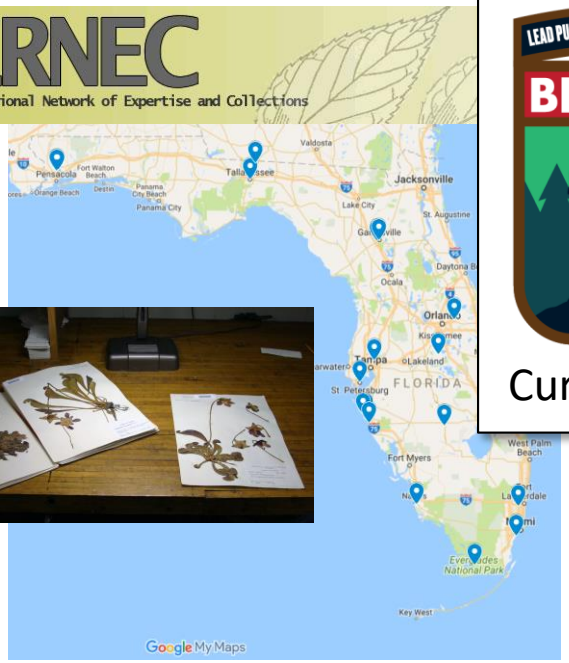

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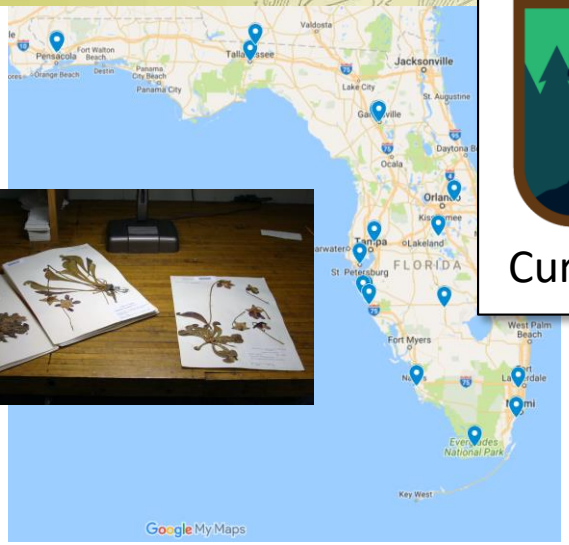

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2017 Workshop

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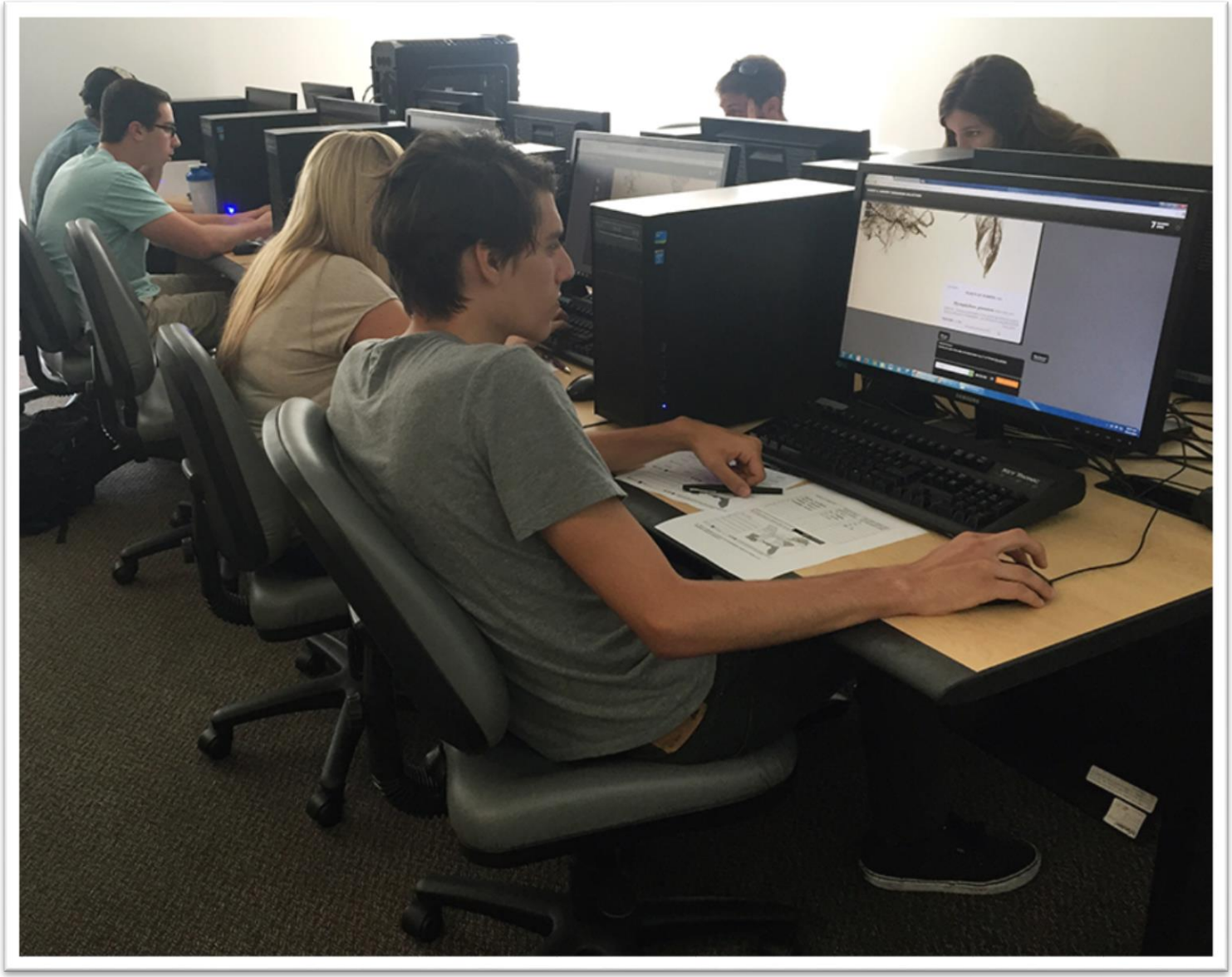
Incentives

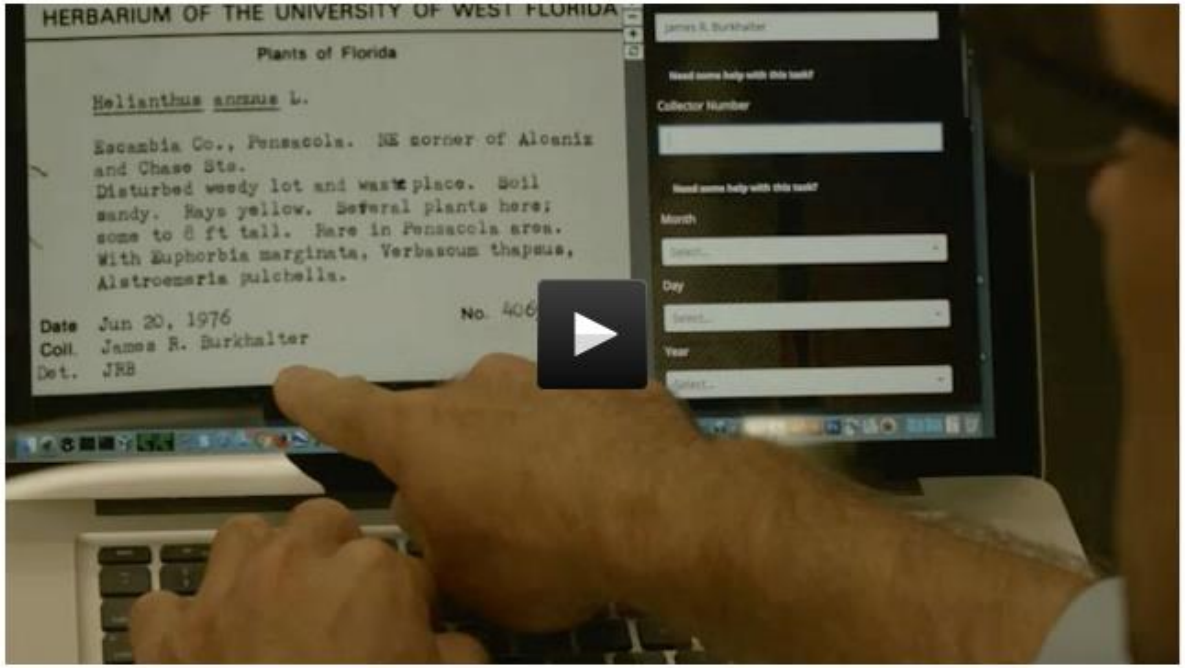


Formal education settings

Crowd-sourced Herbarium Data Transcription

Resource ID#: 166555 Primary Type: Perspectives Video: Teaching Idea

Submit Feedback / Report Problems



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CPALMS Reviewed & Approved by Educators & Subject Experts

Reviewed and Approved

Listen closely as Dr. Austin Mast explains how students can help scientists by transcribing data from real herbarium plant samples.

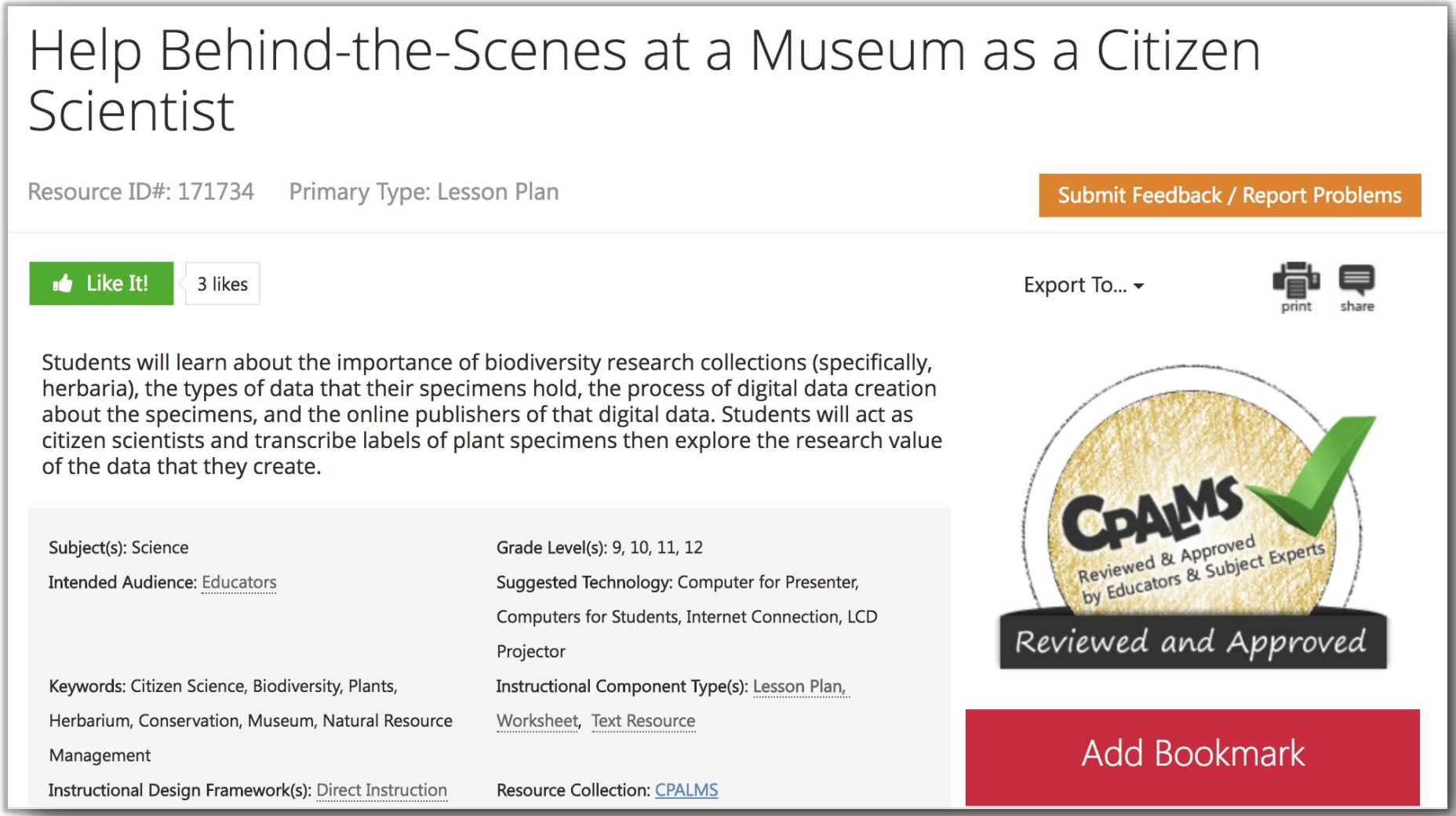
Related Site: Notes from Nature

3 Aligned Standards

Other Resources Related to the Same Standards

Formal education settings

http://www.cpalms.org/Public/PreviewResourcePrespectiveVideo/Preview/166555



Formal education settings

http://www.cpalms.org/Public/PreviewResourceLesson/Preview/171734

Informal education settings

Informal education settings

Your Name

MORPHOLOGY BINGO

Mark the word as you see it in the specimens you transcribe.

Leaf longer than broad	Red fruit	Grass-like leaf	Tendrils	Tiny flower
Egg-shaped leaf	Red petals	White petals	Lobed leaf	Opposite leaves
Leaf broader than long	Tiny leaf		Yellow petals	Bark
Triangular leaf	Tiny plant	Huge leaf	Huge flower	Roots
Toothed leaf margin	White fruit	Alternate leaves	T	

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the author(s) and do not

Your Name

HABITAT BINGO

Mark the word as you see it in the specimens you transcribe.

sandy	swamp	creek	hammock	mesic
scrub	open	peaty	floodplain	woods
pond	lake		roadside	shaded
flatwoods	disturbed	wet	bog	river
ditch	forest	edge	loamy	dry

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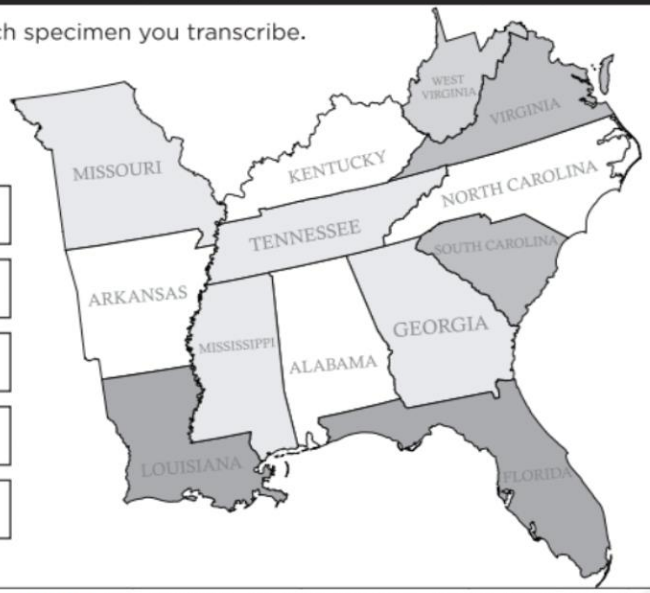
Your Name

GEO LOCATOR

Mark the collection location for each specimen you transcribe.

Other Locations



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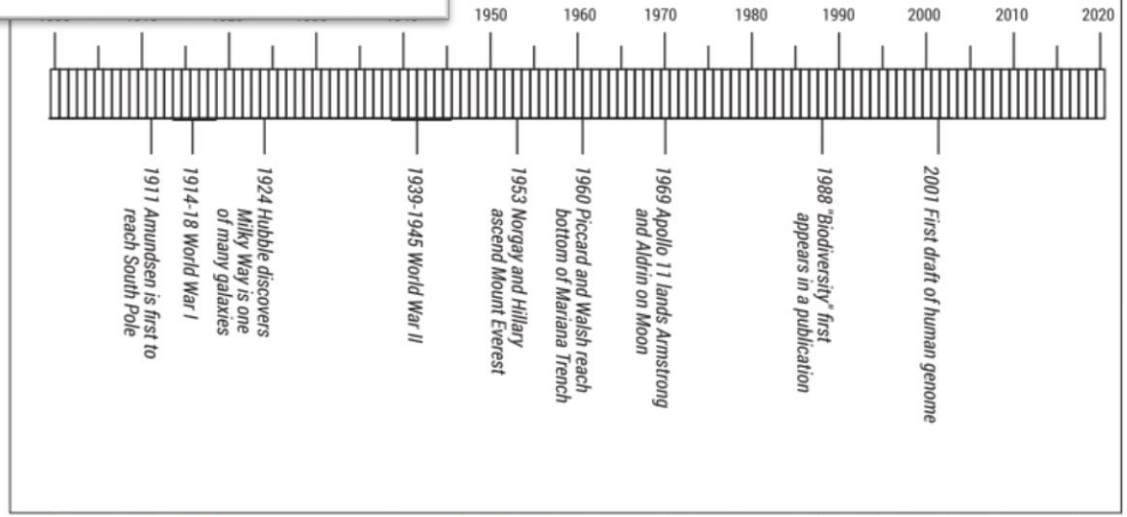
TIMELINE TRACKER

ecimen you transcribe.



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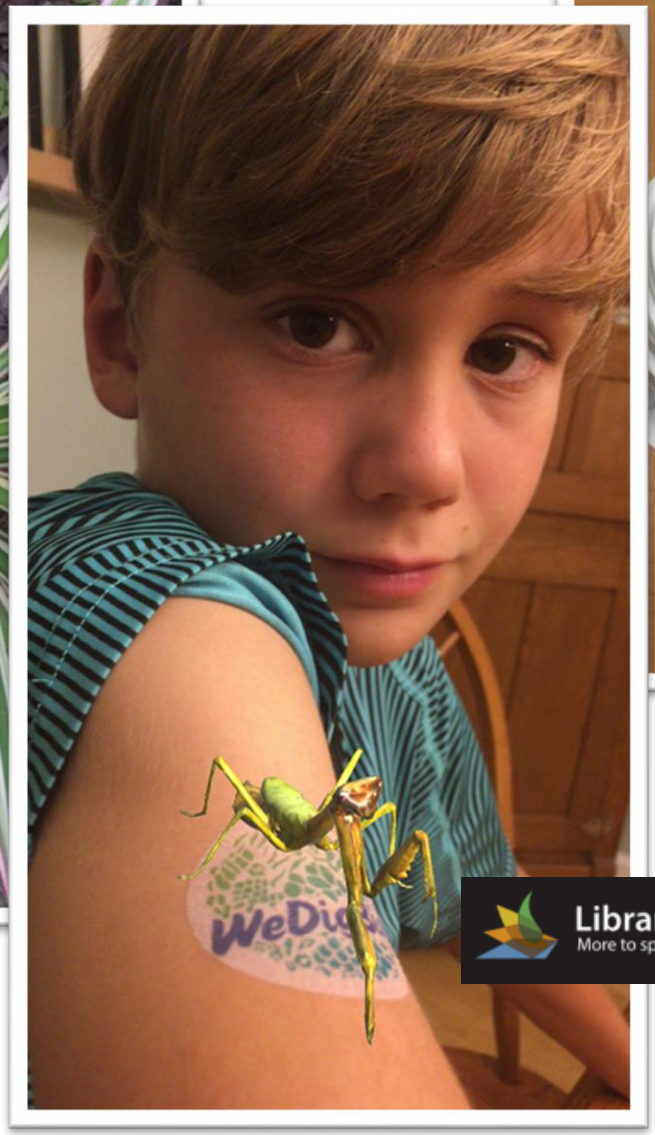

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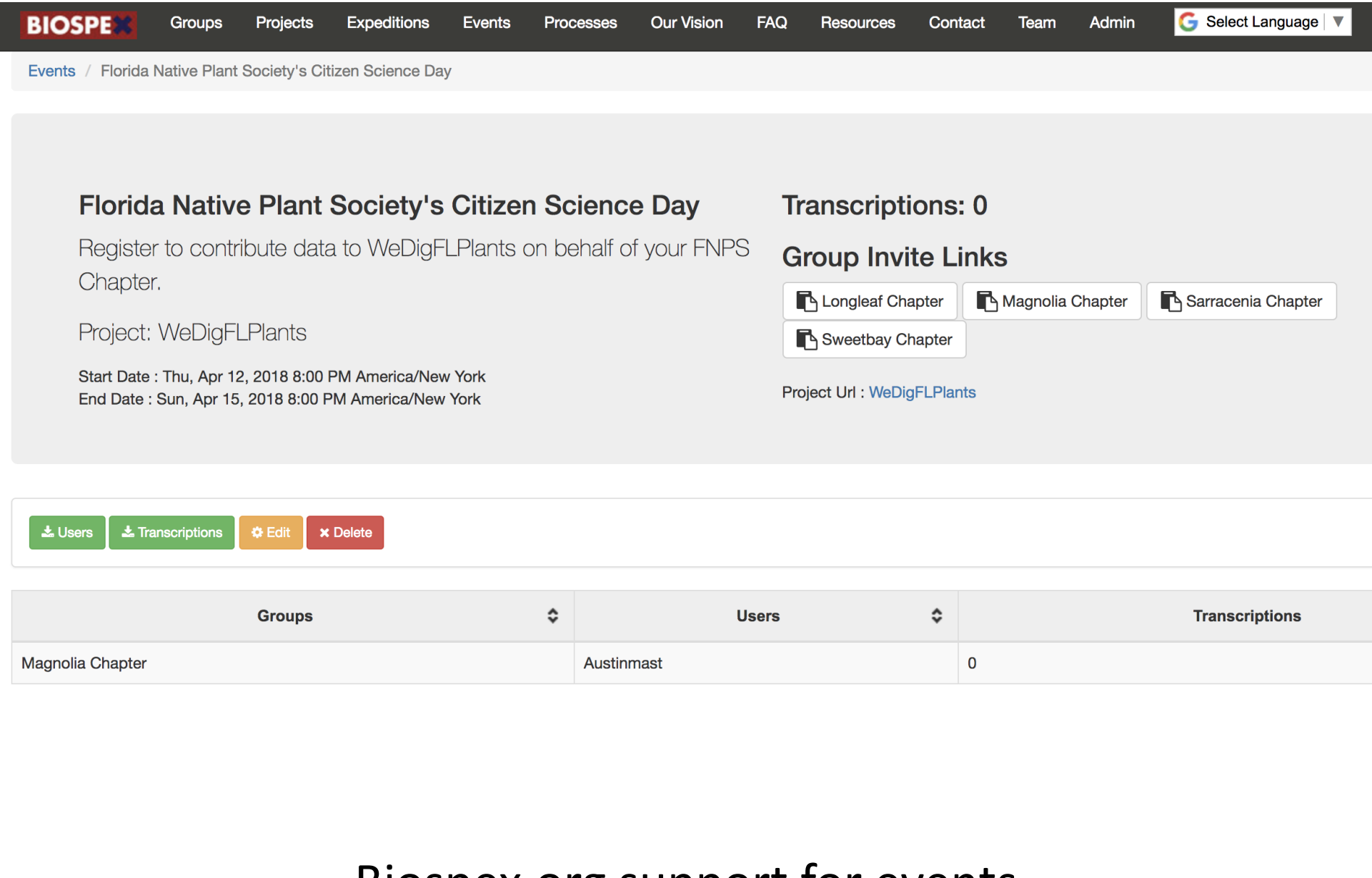
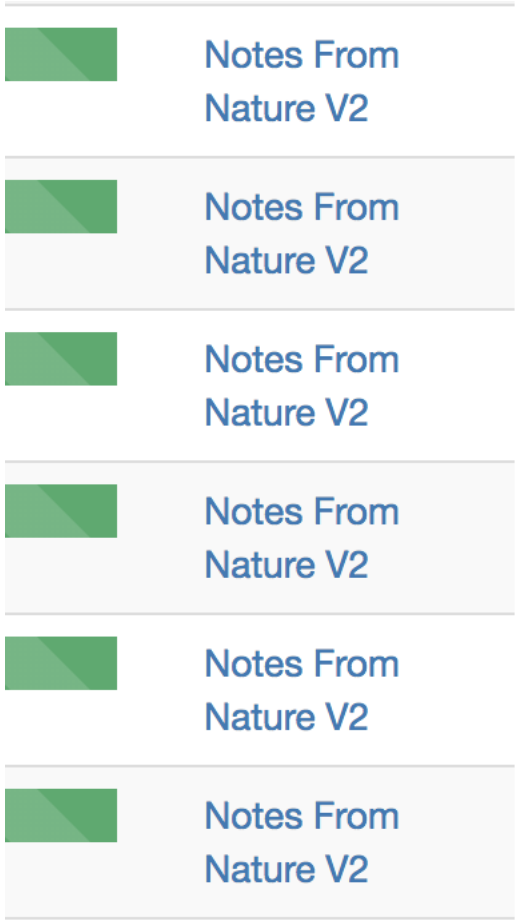


Biospex.org support for events



Keywords

Florida, Plants, Biodiversity, Transcription

Twitter

https://twitter.com/wedigflplants

Events

Florida Native Plant Society's Citizen Science Day

Groups	% of Total Transcriptions	Count
Magnolia Chapter		0
Sarracenia Chapter		0
Sweetbay Chapter		0
Longleaf Chapter		0
Total Transcriptions		0

Biospex.org enables classrooms to work with data they just created

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AARP Events

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AARP FL, Boomer Academy Workshop: Citizen Scientists, Tallahassee, FL, 9/23/17

Saturday, Sep 23, 2017
From 9:30am to 11am

Hopkins Eatery (Market Square)
1415 Market Street
Tallahassee , FL 32308

Phone: 877-926-8300
Contact: AARP FL
Email: LSpencer@aarp.org
Event is closed or full.

Tailored appeals

Clone it for your interest group

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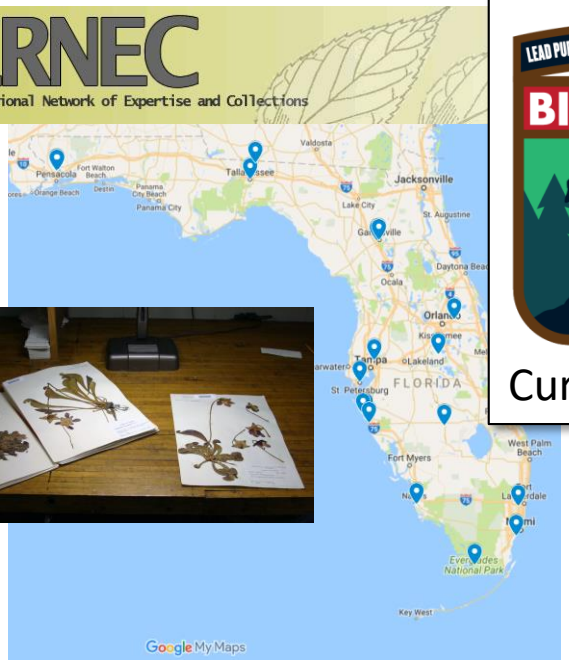

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Acknowledgements

WeDigFLPlants is a large collaboration, but I want to especially thank Libby Ellwood (La Brea Tarpits), Jillian Goodwin (FSU), Katelin Pearson (FSU), Joel Timyan (FNPS), Norris Williams (UF), Sean Kennedy (FSU), Rob Guralnick (UF), Michael Denslow (UF),Molly Phillips (UF), Richard Carter (Valdosta), Zack Murrell (Appalachian State), and Larry Page (UF). Biospex is cyberinfrastructure developed by Austin Mast, Greg Riccardi, Robert Bruhn, Libby Ellwood, Sean Kennedy, and Jillian Goodwin at Florida State University.

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